NORAD COLLECTED REVIEWS

21/2023

Review of the Norwegian development program to combat marine litter and microplastics

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Review of the Norwegian development program to combat marine litter and microplastics

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The report is the product of KPMG AS and the findings, interpretations, and conclusions presented in this report do not necessarily reflect the views of Norad or Norwegian authorities.

Acronyms

Acronym	Explanation
ASEAN	Association of Southeast Asian Nations
ASF	Afroz Shah Foundation
BRS	Basel, Rotterdam and Stockholm Conventions
CCBO	Clean Cities, Blue Ocean program
CDC	Coastal developing countries
CEAN	Cooperativa de Educacao Ambiental Ntumbuluku
CEAR	Cooperativa de Educacao Ambiental Repensar
Cefas	Centre for Environment Fisheries and Aquaculture Science
CLiP	The Commonwealth Litter Programme
CLOCC	Clean Oceans through Clean Communities
CMI	Chr. Michelsen Institute
CMMAI	Coordinating Ministry of Maritime Affairs and Investments
CSE	Centre for Science and Environment
CSEAS	Center for Southeast Asian Studies
EPR	Extended producer responsibility
FAO	United Nations Food and Agriculture Organization
Funbio	Brazilian Biodiversity Fund
GEF	Global Environmental Facility
GESAMP	The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection
GGGI	Global Ghost Gear Initiative
GRADASI	Interfaith Waste Charity Movement
HMF	The Norwegian Retailers' Environment Fund
IEA	Environmental Investigation Agency
IMO	International Maritime Organization
IMR	Institute for Marine Research Norway
INOPOL	Capacity Building for Reducing Plastic and Chemical Pollution in India
INR	Indonesian rupiah
InSWA	Indonesia Solid Waste Management Association
ISWA	International Solid Waste Association
IUCN	International Union for Conservation of Nature
KLD	Norwegian Ministry for Climate and Environment
Km	Kilometer
Marine:DeFRAG	German 'Marine Debris Framework – Regional hubs around the globe
MARPOL	International Convention for the Prevention of Pollution from Ships
MDTF	Multi Donor Trust Fund
MFA	Ministry of Foreign Affairs
MLP	Multi-layer plastic packaging
MoEFCC	Ministry of Environment, Forest and Climate Change

Acronym	Explanation
MoES	Ministry of Earth Sciences
MSP	Marine spatial planning
NCA	Natural capital accounting
NCCR	National Centre for Coastal Research
NGO	Non-governmental organisation
NIVA	Norwegian Institute for Water Research
NOK	Norwegian kroner
OCPP	Ocean Country Partnership Programme
ODA	Official Development Assistance
OECD DAC	Organisation for Economic Co-operation and Development's Development Assistance Committee
OECS	Organization of Eastern Caribbean States Commission
PET	Polyethylene Terephthalate
PSC	Plastic Smart Cities
R&D	Research and development
RBM	Results-based management
ReMLiT	Resilience in the Eastern Caribbean through Reduction of Marine Litter and Pollution
SDGs	Sustainable Development Goals
SGP	Small Grants Program
SIDS	Small Island Developing States
SMART	Specific, Measurable, Attainable, Relevant and Timely
ToC	Theory of Change
ToR	Terms of Reference
UNCLOS	United Nations Convention on the Law of the Sea
UNEA	United Nations Environment Assembly
UNEA-5.2	United Nations Environment Assembly in February-March 2022
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
UNODC	United Nations Office on Drugs and Crime
USAID	United States Agency for International Development
WBG	World Bank Group
WP	Work packages
WWF	World Wildlife Fund

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1. Summary

1.1 Introduction

In 2018, the Norwegian government launched a new development program to combat marine litter and microplastics. The government of Norway has planned to spend NOK 1.6 billion on the development program to combat marine litter and microplastics between 2019 and 2024.

The program is intended to contribute to poverty reduction and the Sustainable Development Goals (SDGs), with particular focus on SDG 14.1: to prevent and significantly reduce the amount of marine pollution, and in particular plastic litter, in partner countries.

The purpose of this review is two-fold: learning and accountability. The review provides an opportunity for learning to inform the future direction of the program by shedding light on progress made towards reaching its main objectives.

The review assesses the coherence of the portfolio, including assessments of portfolio balance and composition (including thematically and geographically); lessons learned; and untapped potential against a set of identified dimensions.

The review also assesses the effectiveness of the program, by determining likely or achieved progress of the portfolio towards the main objective to prevent and reduce marine litter, and towards the short- and medium-term effects of the interventions' outputs/outcomes.

1.2 Key Findings

Below are the key findings of the review organized by the review criteria, coherence and effectiveness.

1.2.1 Coherence – how well does the marine litter program fit?

Criteria	Rating	Evidence	Key finding
Coherence **Is the project fit for purpose?**	★★★★☆☆	Strong	The program is largely coherent and aligned with the initiatives and priorities of project partners and other actors, with some room for improvement. The program can benefit from reframing with regards to waste value chain interventions and geographical focus.

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+	The Norwegian program to combat marine litter is to a large extent coherent and well-aligned with the policies, priorities, and interventions of a wide range of other relevant actors including global and regional initiatives, national and local governments, and implementing project partners such as NGOs and civil society organizations.
+	The portfolio demonstrates an even spread of cooperation with various counterparts and partners to reach project objectives, indicating good coverage in terms of involvement of different stakeholder types. There is also an even spread in terms of benefactors targeted by the portfolio projects.

Projects in the marine litter portfolio are found to mostly focus on improving management of plastic waste in partner countries (Outcome 1), and on strengthening global commitments and national and regional instruments (Outcome 4). There is least focus on program Outcome 3, i.e. few partners explicitly target private sector performance with regards to sustainable production, use, and waste management.

The top three waste value chain interventions most represented in the marine litter portfolio are: 1) Enforce/develop international or regional frameworks and regulations; 2) National enabling environment; and 3) Expand waste collection rates.

The portfolio is largely balanced, both in terms of thematic focus areas and geography, with some room for improvement with regards to adherence to current literature. The program composition is to some extent logical and in line with current literature and good practices, however there is room for improvement in particular with regards to geographical target areas as well as where in the waste value chain the program intervenes.

A comparison with similar development programs of other donor countries to combat marine litter shows that there is overlap in terms of intervention types and geographic focus, but with slight differences in priorities. Relatedly, the marine litter program has to a very limited extent leveraged other Norwegian development programs to achieve results.

There is untapped potential in the marine litter program. There is firstly potential to increase the focus on countries which generate and export waste, including countries in which significant production and export of plastic products occur. Relatedly, there is space to target interventions further upstream in the waste value chain to tackle plastic pollution at the production stage.

The review finds that there is least focus on Outcome 3 (12%), i.e. few partners explicitly target private sector performance with regards to sustainable production, use, and waste management.

The three waste value chain interventions found to be the least represented in the portfolio are predominantly focused in the upstream production side of the value chain, again highlighting untapped potential for the marine litter program: 1) Substitute primary plastics with suitable alternative materials; 2) Design products and packaging for recycling or reuse; and 3) Scale up global capacity of chemical conversion.

1.2.2 Effectiveness – is the program achieving its objectives?

Criteria	Rating	Evidence	Key finding
Effectiveness **Is the project achieving its objectives?**	★★★☆☆☆	Medium	The project has to some extent been successful with regards to meeting its objectives. The results-based management system of the program makes it difficult to draw out definitive aggregate evidence on results. The program logic and results framework should be updated for an eventual next period.
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- 53% of project partners are assessed to have achieved their set targets at the time of this review, while 39% have done so to some extent. Only 8% of the project partners are assessed to not have achieved their set targets at all.

- KPMG considers that the marine litter program has likely made moderate-to-large contributions towards its main objective to prevent and significantly reduce marine pollution. The review also finds that the program contributes to raising the awareness of both decision-makers and the public with regards to the importance of combating marine litter and plastic pollution.

- The highest levels of project target achievement across waste value chain interventions can be found in projects implementing key interventions identified as well-represented in the portfolio, indicating that the interventions as they are currently represented in the program are effective to a moderate-to-large degree.

- Target achievement towards the Outcomes 1, 2 and 4 of the marine litter program is relatively equal (47-52%), with the exception of Outcome 3 which has seen lower levels of attainment (27%). This is measured as the share of projects addressing a given outcome reporting results achievement in line with set targets

- Achievement against set targets is higher and relatively equal in projects deploying activity types Thought leadership and advocacy at 55%, Technical assistance and capacity building at 52% and R&D and innovation at 50%. Among projects deploying activity Financing, no projects report results achievement in line with set targets.

- The program has to some extent made contributions to the process and negotiations towards the new global agreement to combat marine litter and plastic pollution, and to a large extent influenced the contents of the negotiating mandate, like securing particular wording about the role of the informal sector.

- The program to a limited extent mobilizes additional investments and other contributions from development partners and the private sector. However, as an early funder to the marine litter sector Norway has acted as a trailblazer for other donors to follow suit.

- Project partners are generally tracking results in a qualitative manner, and project-level results frameworks and indicators are to some extent relevant and useful. Project plans and schedule for achieving targets are to a moderate extent realistic and based on evidence, with some room for improvement. Program outcomes and related outputs are not found to be SMART (Specific, Measurable, Attainable, Relevant and Timely), however some project indicators are.

- Projects are to a very large extent planning to conduct, or have conducted, evaluations to assess the effect of activities, but there is limited evidence that an effective learning feedback mechanism exists for the ongoing development of the program. The program is found to some extent to be sharing lessons learned and facilitating collaboration among projects and key partners, but some partners wish for more formal learning mechanisms.

- The program RBM system, including the results framework, is not adequate to capture results in line with the outcomes and impact of the program. Reporting data collected through the program RBM system is thus not suitable for aggregation across the portfolio. Due to the lack of standardized indicators and quantitative reporting, it is therefore not possible to assess e.g. how the different project types compare in terms of cost efficiency, mobilization and impact on beneficiaries.

1.3 Key recommendations

Below are key recommendations presented for the program both in the short and medium term that Norway could consider moving forward, organized by program management and results, and program design and focus.

1.3.1 Current program period

1.3.1.1 Program management and results

1. **The marine litter program should prioritize selected common, quantitative indicators to track goal attainment across projects.** KPMG recommends to first introduce a set of simple crosscutting indicators based on the existing portfolio. Projects can select the crosscutting indicators applicable to their projects and report against these already in the current program period. Reporting on attainment against such tangible and "practical" indicators, which also will not require them to alter their existing results frameworks, should be feasible. Indicators would have to be defined based on what Norway sees as priority to measure.

   Potential indicators inspired by other programs, project partners and developed by KPMG:

   a) Number of households with increased access to waste management services (Outcome 1)

   b) Collected, recycled, or prevented waste in kilograms (Outcome 1, Outcome 2)

   c) Number of knowledge products produced by project partners (Outcome 1)

   d) Number of innovations supported by the project partner (Outcome 1, Outcome 3)

   e) Area cleared of legacy waste in km^2 (Outcome 2)

   f) Number of global/ regional consumer goods companies, with a market share larger than 10%, taking responsibility for end-of-life impact of their own products and packaging (Outcome 3)

   g) Number of regional/national action plans supported by the project partners (Outcome 4)

   h) Number of countries committed to three strategic goals defined by the High Ambition Coalition to End Plastic Pollution in the plastic treaty negotiations (Outcome 4)

   a) Number of public policies that advance Extended Producer Responsibility, access to waste management, etc. supported by the project partner (Outcome 3)

2. **The program should include the Sustainable Development Goals that reflect its actual logic, activities, and desired outcomes to better align with and contribute to the upcoming global agreement on plastics.** Indicators for the program's main global goal of SDG 14.1 are largely designed to monitor plastic marine litter density, leakage to the ocean, and composition, and obtained by modeling, earth observation or sampling, and are not applicable to most projects in the portfolio. Relevant SDGs with related sub-indicators are:

   i. SDG 8: Decent work and economic growth

   ii. SDG 11: Sustainable Cities and Communities (11.6)

   iii. SDG 12: Responsible Consumption and Production

   iv. SDG 15: Life on Land.

1.3.1.2 Program design and focus

1. **Increase support to scientific research and evidence generation for determining the most impactful future interventions to combat marine litter.** In addition to targeting support towards national, regional and global policies and regulations, the review finds that, as the field of research on marine litter/plastic pollution is relatively young, there is also a need to facilitate more research

and generate an evidence base on which to base the future direction of both the Norwegian marine litter program as well as the sector more broadly. This is based both on interviews with key research partners, as well as by the gaps identified in the marine litter program logic as based on literature which at program conception as recently as in 2019 was considered best-practice, which is already now considered not entirely up to date. This showcases the significant momentum of the scientific field on this topic, and the need to keep bolstering the evidence base for optimal programming to combat marine litter and plastic pollution.

2. **The program is encouraged to facilitate collaboration and lesson-sharing between similar partners in different countries, in particular South-South cooperation.** Cross-program cooperation and leveraging of lessons learned across projects was raised as a desire in interviews with project partners. Proposed venues might be study trips supported by Norway in which one partner visits another to inspect project sites and exchange experiences or multi-partner thematic, geography- or project-focused workshops in which one partner hosts several others with support from Norway. Norway could also take an active role in requesting, collating and disseminating lessons learned across projects, perhaps by theme or geography, for example in a newsletter format.

3. **Supporting selected professional cleanup activities**. Although clean-ups are not a key priority for support by the Norwegian marine litter program, the review finds that clean-ups have significant positive effects on awareness-raising and advocacy outcomes when deployed as one part of a broader strategy to combat marine litter, e.g. alongside efforts to improve waste management and promote behavioral change. Clean-ups also have the tangible effect of removing legacy waste before plastics are deposited further into the sediment. Mangroves present one such ecosystem, which has been shown to act not only as a plastic-, but also a carbon sink, thus serving a dual environmental objective. As such, KPMG considers that clean-ups in selected vulnerable ecosystems could be an appropriate part of the Norwegian “tool box”.

1.3.2 Future program period

1.3.2.1 Program management and results

1. **The program should offer project partners clear guidance and tools to ensure appropriate results-based management.** Engagement with and funding of a broad range of actors and institutions is required to solve the problem of plastic pollution. This entails collaboration with project partners beyond traditional development professionals. It is clear from project documentation such as applications and results reporting that the program would benefit from capacity-building of project partners in this regard. Increasing project partners’ competence on results-based management – even on essentials such as differentiating between and reporting on impact, outcomes, and outputs in line with development standards – would serve to bolster the program’s ability to aggregate results across the portfolio.

1.3.2.2 Program design and focus

1. **Norway should increase support to circular economy initiatives, with particular focus on waste value chain interventions targeting the private sector in the upstream.** The analysis also finds continued added value of Norway supporting national enabling environments, as well as strong potential for increased prioritization of enforcing/ enabling international/ regional frameworks and regulations. With the Norwegian marine litter program being a development program, however, it might face difficulties in terms of targeting the private sector directly under ODA guidelines. As such, the identified gaps with regards to upstream, production side waste value chain interventions may be addressed by deploying a set of strategies. Firstly, Norway can support projects targeting decision-makers in relevant ODA countries, as well as multilateral organizations and global initiatives, to strengthen national and global enabling environments facilitating a circular economy approach, including regulations directly targeting the private sector such as on EPR. Enabling environment support is typically executed through government-to-government (G2G) or multilateral technical assistance programs. As such, there is likely scope for Norway to indirectly target private sector upstream initiatives through such policy-oriented avenues. Secondly, Norway can support projects actively engaging with the private sector to prepare them for efficient adaptation to relevant new regulations and for taking extended responsibility as producers of plastic products.

2. **Reframe the geographic focus of the program, inspired by wording in the German marine litter program.** The focus today is on populous and economically fast-growing countries in Asia with long coastlines. Asian countries were ranked as top contributors to the marine litter issue in a Jambeck et al. study from 2015, which is cited in the draft for the program logic. Authors of the 2015-study have in recent years specified how the study should be understood, emphasizing weaknesses in the model. A stated focus on populous and economically fast-growing countries, in addition to rapid urbanization, regardless of location, can enable further support for landlocked countries where riverine plastic pollution or social costs of mismanaged waste may still be substantial. The program is lending some support for land-locked countries at the ProBlue-level, but not directly in its own portfolio.

3. **Norway should leverage its competitive advantage when it comes to oceans management.** Interviewees in Indonesia e.g. noted that the marine litter program would benefit from leveraging the Norwegian Oceans for Development program to help partner countries integrate marine spatial planning into waste management on land and integrate their ocean and coastal management plans. Finally, one multilateral project partner in Indonesia proposed that Norway should use its competitive advantage at sea to address the 20% of marine litter stemming from sea-based sources.

2. Introduction

2.1 Background

2.1.1 The Norwegian program to combat marine litter and microplastics

In 2018, the Norwegian government launched a new development program to combat marine litter and microplastics. The government of Norway has planned to spend NOK 1.6 billion on the development program to combat marine litter and microplastics between 2019 and 2024, and several of the funded initiatives have already concluded. The program is overseen by the Norwegian Ministry of Foreign Affairs (MFA), Norad, and the Norwegian Ministry for Climate and Environment (KLD).

The program is intended to contribute to poverty reduction and the Sustainable Development Goals (SDGs), with particular focus on SDG 14.1: to prevent and significantly reduce the amount of marine pollution, and in particular plastic litter, in partner countries. As such, the program is aligned with the SDG 14.1 global ambition that by 2025 the world should prevent and significantly reduce marine pollution, in particular from land-based activities, including marine debris and nutrient pollution.

The program logic prioritizes the creation and development of land-based waste management systems, but also funds research on marine litter and supports initiatives that contribute to increased awareness, knowledge exchange, technology transfer and capacity building. It also seeks to support processes to achieve stronger international commitments and agreements to prevent marine litter, as well as to improve private sector performance with regards to sustainable production, use and responsible waste management. Several project partners receive support to influence and advise on government policies, regulations and action plans, and beach cleanups are occasionally supported as part of raising awareness.

The stated geographical focus of the program is on populous and economically fast-growing countries in Asia with long coastlines. Additionally, the program directs preventative measures towards countries with rapidly growing economies in Africa and supports projects to strengthen waste management systems and for clean-ups along the shoreline in small island developing states (SIDS). Funded projects under the program reflect this stated priority, although 46,6 % of funding goes to projects that are global in scope[1].

2.1.2 The problem

Marine litter, plastic pollution and unmanaged waste are three interconnected global issues that lead to significant environmental, health, social, and economic impacts. Causes include lack of waste management infrastructure, illegal dumping, accidental material loss or littering, and international waste trade with poor oversight. Without correct interventions, these issues are expected to accelerate alongside increased consumption and waste generation, with inequitable impacts on low-income populations.

The properties of plastic lead it to be a persistent and harmful type of pollution. Both its durability and different chemical additives pose a danger to human and environmental health. By 2050, plastic production is expected to grow to 1,600 million tons per year, up from 407 million tons in 2015. Of all plastics ever produced to date, 79% is estimated to have accumulated in landfills or in the natural environment (Geyer et al., 2017). The material is found on remote beaches, in the deep ocean, the air, glaciers, rivers, animals, and human blood.

[1] See Appendix 3 for detailed breakdown of portfolio

2.1.3 Towards a global agreement and Norway's role

Combating these interconnected issues requires a diverse set of strategies targeting the entire economic lifecycle. An intergovernmental negotiating committee (INC) is currently developing an internationally legally binding instrument to support such a framework. At the fifth session of the United Nations Environment Assembly (UNEA-5.2) in February-March 2022, countries around the world agreed to work towards a new global agreement on combatting marine plastic litter and plastic pollution. The global agreement will be based on a comprehensive approach, addressing the full life cycle of plastics from production to disposal, taking into account the principles of the Rio Declaration on Environment and Development.

The new agreement will have to fill gaps in other international policy instruments such as the Basel Convention addressing waste trade, London Convention addressing dumping directly into the sea, and the International Convention for the Prevention of Pollution from Ships (MARPOL). The International Negotiating Committee is expected to complete its work by the end 2024. During this time, Norway will co-chair a High Ambition Coalition to End Plastic Pollution with Rwanda, working to obtain consensus behind such a comprehensive instrument.

The Norwegian government has taken a proactive international role in sustainable ocean issues, **including combating marine litter**. Norway formed the High-Level Panel for Sustainable Ocean Economy with 11 other heads of government and put forth the amendment to include most end-of-life plastics under the export restrictions in the Basel Convention. It was also a priority of the Norwegian government to secure a negotiating mandate for a legally binding global agreement on plastic pollution at UNEA 5-2. Implementing and recognizing lessons learned can help Norway leverage its position on plastic pollution, sustainable oceans and waste management, to the benefit of current and future inhabitants of the earth.

2.2 Objective of review

Norway has commissioned this review with the dual purpose of learning and accountability. The review provides an opportunity for learning to inform the future direction of the program by shedding light on progress made towards reaching its main objective (to prevent and significantly reduce the extent of marine litter from large sources in developing countries) and corresponding outcomes.

The review highlights potential adjustments to the portfolio where relevant for improving program performance. The review also serves as a basis for accountability, e.g. through information to the public on program results. The review objectives are as follows:

Coherence: The review assesses the composition of the program portfolio of 47 projects and identifies opportunities for selecting interventions that increase the likelihood of reaching the main objective of the program. This includes assessments of:

- ✓ Portfolio balance and composition (including thematically and geographically)
- ✓ Lessons learned with regards to existing synergies
- ✓ Untapped potential against a set of identified dimensions.

Effectiveness: The review assesses the likely or achieved progress of the portfolio towards the main objective to prevent and reduce marine litter, and towards the short- and medium-term effects of the interventions' outputs/outcomes.

Moreover, as the contours of a new global agreement to combat plastic pollution emerge, a review of the Norwegian program to combat marine litter and microplastics is also highly relevant and timely. With new data and knowledge on marine litter being made available, and with some of the Norwegian funded initiatives having reached their conclusion, reviewing the program at this juncture can:

- ✓ Shed light on the future course of the program and inform adjustments to the Program Logic
- ✓ Secure accountability by making available information on program results
- ✓ Inspire key priorities leading up to the global agreement on plastic pollution

- ✓ Aid in considering its place alongside parallel marine litter tracks and initiatives in the Norwegian government and other development partners.

The review covers the period from the 2018 program launch until June 2022. In terms of geographical coverage, the review considers the entire program, with Indonesia and India serving as in-depth country studies due to the relative high number of projects supported in these countries.

2.3 Portfolio management

For the purposes of this assignment, KPMG understands a portfolio to be a collection of grants, interventions and initiatives that together contribute to a common set of objectives and have a common underlying logic. The portfolio is a unit of management, and in relation to development cooperation and aid administration typically involves grant and program management, as well as wider normative work.

Portfolio management relates to the practices and procedures used to design, plan, organize and direct/coordinate a portfolio towards the effective and efficient achievement of the portfolio objectives. This is important to ensure strategic focus, more efficient management and greater impact, as well as to balance risk, facilitate learning and improvement, and improve sustainability.

2.4 Methodological approach

To assess the coherence and effectiveness of the program in response to the review objectives, KPMG has compiled data and conducted the analysis through a set of methodological choices. These choices have allowed KPMG to gather and triangulate rich quantitative and qualitative data:

- ✓ **A document review** including but not limited to program logic documents, project plans, results frameworks, annual reports, and other relevant portfolio documentation.

- ✓ **A literature review** to identify new knowledge and best practices on intervention types on the topic of marine litter and waste management in sustainable development.

- ✓ **Key-informant interviews** of stakeholders including, but not limited to, Norad, MFA, KLD, project partners and counterparts, and other relevant stakeholders.

- ✓ **Surveys** to harness inputs and feedback on the program and achievements towards the main objectives from 1) project partners and 2) project counterparts:

    - **The project partner survey** sent to all 47 projects received 29 responses. Respondents represent multilateral organizations (48%), NGOs and civil society (38%) and private sector (14%).

    - **The project counterpart survey** sent to 72 counterparts received 27 responses. Respondents represent government (41%), NGOs and civil society (37%) and the private sector (22%).

- ✓ **Field visits** to develop country case studies focused on the countries with the highest concentration of projects and activities under the program: Indonesia and India. A total of NOK 220 million have so far been pledged to 11 projects conducting activities in Indonesia and India, representing 17% of total funding committed under the marine litter portfolio.

- ✓ **Portfolio Analysis Tool** to solve the complex methodological challenge of assessing and aggregating results achieved for a program portfolio of 47 projects. The project documentation as shared by Norad has fed into the tool as the basis for both qualitative analysis, and quantitative where possible.

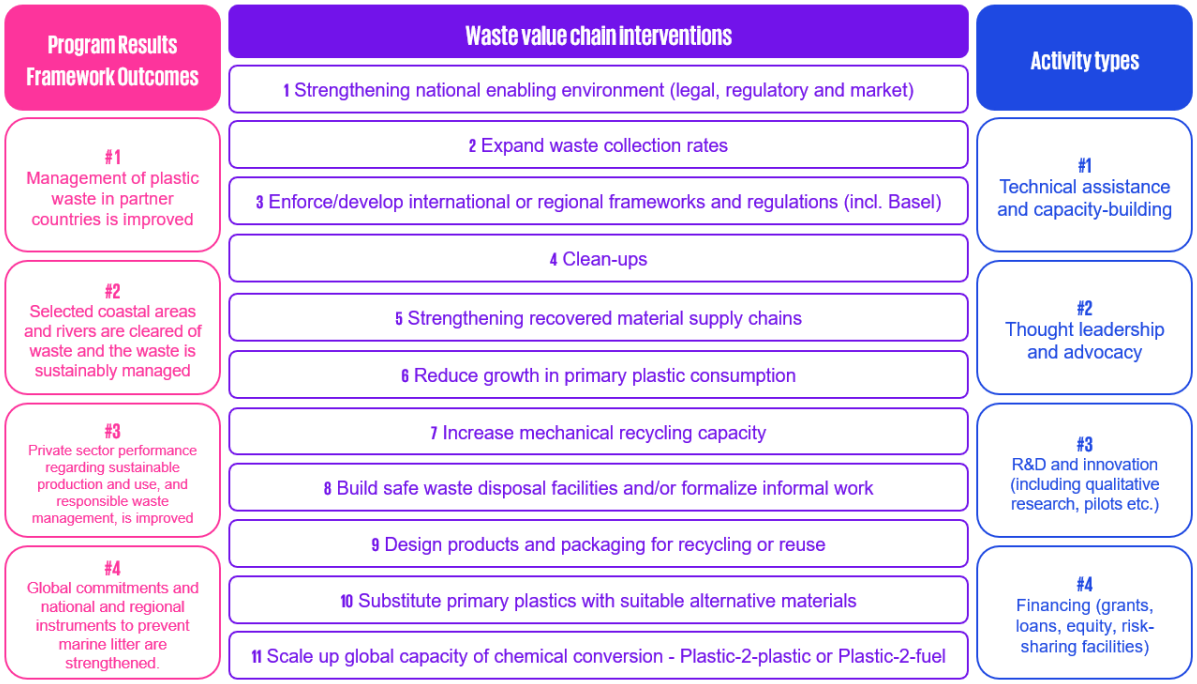
  The KPMG team identifies three sets of tags intended for use in the Portfolio Analysis Tool to categorize and capture the portfolio to ascertain focus, and thematic and geographical balance:

    - **Tag set #1: the four program Outcomes** to identify the spread and saturation of projects across the four outcomes of the program result framework (see Figure 4 for full framework).

- **Tag set #2: 11 waste value chain interventions**[2] inspired by Systemiq's 'System interventions'[3] and adapted to reflect a comprehensive development program to combat marine litter.

- **Tag set #3: four activity types** intended to capture the activities via which to intervene in the waste value chain under a comprehensive development program to combat marine litter.

Figure 1 Portfolio analysis tag sets



By deploying this approach, the review team seeks to both categorize and measure the Norwegian marine litter program along the lines of its own identified priorities, but also along the parameters of what is considered – for the purpose of this review – a comprehensive development program to combat marine litter and microplastics. This approach is intended to allow KPMG to assess how the Norwegian program is performing against its own objectives, as well as to identify where it falls across a set of waste value chain interventions and activity types to identify gaps and untapped potential. The goal is to produce an analysis of what the program *currently is* as well as what it *could be*.

2.5 Limitations

This is a review, not an evaluation with a relatively limited scope focusing only on coherence and effectiveness. This narrows the assignment by excluding other DAC evaluation criteria such as relevance, sustainability, impact, and so on. As Norad notes[4]: "[Reviews] are normally restricted in its thematic scope – often limited to verifying that the program is on track with its implementation according to plan, less extensive, and with less emphasis on independence".

Norad staff accompanied the review team in interviews with both project partners and counterparts in India and Indonesia. The presence of Norad staff was due to learning being identified as a key objective of the review, and the country case studies presenting an opportunity to gain on-the-ground experience of the program implementation. The presence of a donor in said interviews has likely influenced interviewee responses and the review team thus presents findings in an unbiased manner to maintain independence.

The lack of defined results framework indicators at programmatic level provides a challenge when it comes to measuring the program's overall achievement towards its main objectives. Funding under the marine litter program is also not tagged according to program outcome or output and as such it can be

[2] See Appendix 1: Literature review for a detailed description of waste system value chains and interventions.

[3] Pew Charitable Trusts and SYSTEMIQ (2020) "Breaking the Plastic Wave."

[4] Norad (2022) What is Evaluation? https://www.norad.no/en/front/evaluation/what-is-evaluation/

challenging to track funding towards the various thematic areas and related results. Moreover, the quality and completeness of project documentation provided for the review has varied greatly, also creating challenges with regards to assessing results across the portfolio.

The review team has not conducted comprehensive primary data collection at beneficiary level given the assignment purpose, timeframe and available resources. The review team relied on existing documentation such as program/project documents and other relevant documentation, interviews, and survey responses from program stakeholders as set out in the methodology section. No additional research has been performed by the review team given the limited timeframe and available resources.

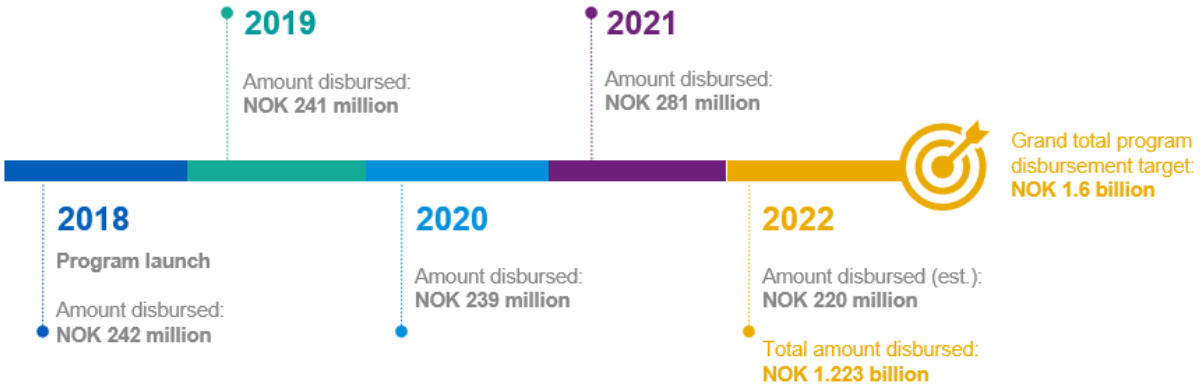
3. Program overview

3.1 Program portfolio

Just short of NOK 1.3 billion have been committed by Norway to the program to combat marine litter and microplastics as of June 2022. The largest grants, and the majority of funds pledged (Table 5 and Table 6), have gone to global initiatives such as WWF No Plastics in Nature, World Bank ProBlue, UNEP Programme Cooperation, and the Secretariat of the Basel, Rotterdam and Stockholm (BRS) Conventions work to address plastic waste.

Just over NOK 1.2 billion have been disbursed by Norway to the projects under the program as of the time of review [5]. This denotes good progress made against the program disbursement target of NOK 1.6 billion before 2024. Disbursement level was highest in 2021 and will be lowest in 2022, based on actual (2021) and estimated (2022) figures provided by Norad for this review.

Figure 2 Program disbursement timeline and progress



The program portfolio includes 47 projects (for the review period from 2018 to June 2022) carried out with project partners predominantly including multilateral organizations such as the United Nations and the World Bank, non-governmental organizations, and research institutes. See Appendix 3 for an exhaustive list of the projects supported by the Norwegian program to combat marine litter and microplastics during the review period.

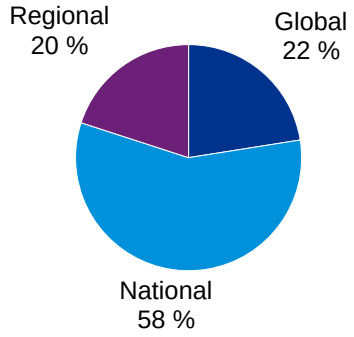
Most of the supported projects work with governments, local authorities, civil society organizations and/or the private sector. The review team finds that 58% of projects under the program have a country-focused/ national scope, with projects in over 30[6] countries, while 22% and 20% of projects have a global or regional scope, respectively (Figure 3). It should be noted that in terms of size, 46,6 % of funding under the Norwegian program to combat marine litter and microplastics goes to projects that are global in scope[7].

[5] Source: Norad funding figures as shared with the review team.

[6] Based on document review and information received from Norad. It is not possible for the review team to determine the exact number of countries due to the significant global and unearmarked funding in the portfolio which does not lend itself to such specific geographical analysis.

[7] See Appendix 3 for detailed breakdown of portfolio

Figure 3 % of projects with country, regional and global level focus



3.1.1 Portfolio overview

Norwegian funding levels vary across the portfolio, from the global 'No Plastic in Nature' project by the World Wildlife Fund (WWF) Norway, to the 'Establishment of a Programme on Marine Litter and Microplastics' in Mozambique by Cooperativa de Educacao Ambiental Ntumbuluku (CEAN), each receiving NOK 161 million and NOK 1.04 million, respectively[8]. The average size of funding by project is NOK 27.3 million across the portfolio.

The majority of projects under the marine litter portfolio are with NGOs and multilateral partner organizations, while global projects have received most funding. Table 1 shows the spread of partner types across the portfolio[9]. Global projects[10] have received just shy of 47% of total funds pledged under the Norwegian marine litter program, closely followed by projects in Indonesia and India[11].

Table 1 Project partner types

Partner type	Number of partners	% of total
Multilateral	13	36 %
NGO	13	36 %
Research and Education	7	19 %
Government Organization	1	3 %
INGO	1	3 %
Private sector	1	3 %
Sum of individual partners	**36**	**100%**

With regards to partner countries, Indonesia and India receive the most funding under the Norwegian marine litter program. This focus of funding is in line with the stated geographical focus of the program: populous and economically fast-growing countries in Asia with long coastlines. See Appendix 3 for a complete overview of the geographical distribution of the portfolio of the Norwegian marine litter program.

3.1.2 Results-based management of the portfolio

Central to the program logic and implied Theory of Change of the marine litter and microplastics portfolio is its results framework (Figure 4). The framework consists of qualitative global goals in line with UNEA 3/7 and the SDGs, desired program impact, a set of four main outcomes, as well as an outline of potential outputs, all described in narrative form.

[8] See Appendix 3 for an overview of projects supported by Norway during the review period, organized by amount of funding pledged to each project.

[9] Individual partners are counted once, regardless of number of projects funded by Norway under the marine litter portfolio.

[10] WWF No Plastic in Nature; World Bank PROBLUE; UNEP Programme Cooperation; Secretariat of the Basel, Rotterdam and Stockholm (BRS) Conventions; the Global Environmental Facility (GEF); INTERPOL Marine Pollution Enforcement Project Phase II; UNDP Ocean Innovation Challenge; and WHO The Potential Human Health Impacts of Microplastic in the Environment.

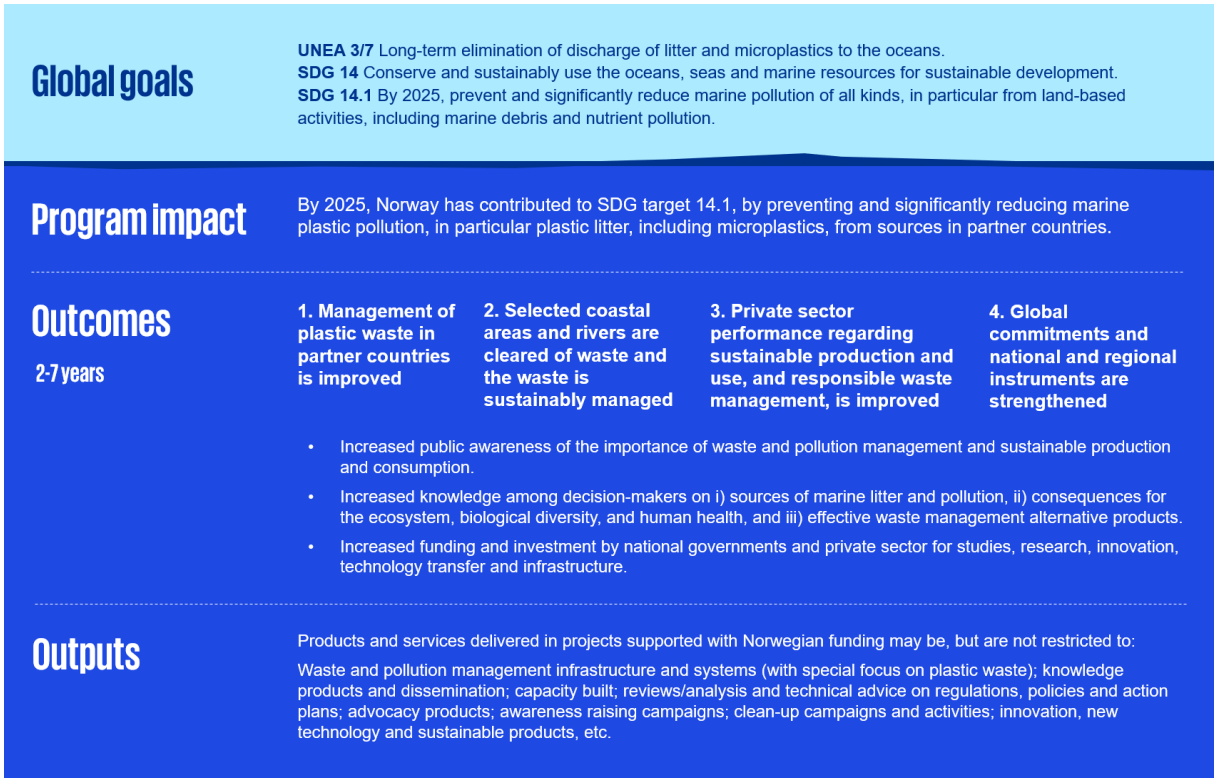
[11] See Appendix 3 for a detailed overview of portfolio geography by amount of funding by Norway and number of projects, across program period.

Contributing towards SDG 14.1 is the stated main objective of the Norwegian program to combat marine litter and microplastics. Norway has not adopted the SDG 14.1 quantitative indicators. Consequently, the main objective of the development program is to prevent and significantly reduce the amount of marine pollution, and in particular plastic litter, in partner countries. To achieve this, program funding over the review period has been targeted towards four main outcomes:

- ✓ **Outcome 1:** Management of plastic waste in partner countries is improved
- ✓ **Outcome 2:** Selected coastal areas and rivers are cleared of waste and the waste is sustainably managed
- ✓ **Outcome 3:** Private sector performance regarding sustainable production and use, and responsible waste management, is improved
- ✓ **Outcome 4:** Global commitments and national and regional instruments to prevent marine litter are strengthened.

In terms of outputs, the results framework proposes some potential products and services to be delivered by the portfolio to combat marine litter and microplastics. However, a consolidated approach for measurement of these across the program portfolio is not identified by Norway. Moreover, thematically the proposed outputs also cover an extensive range of issues and are not formulated in a manner which lends itself easily to quantitative tracking of results.

Figure 4 Results framework for the Norwegian program to combat marine litter and microplastics



4. Program review

4.1 Coherence – how well does the marine litter program fit?

REVIEW FRAMEWORK

The framework for the review of coherence is:

1. **Alignment:** To what extent is the program aligned with policy frameworks and interventions of project partners, project counterparts (governments, NGOs or private sector) and other donors? To what degree is the program coherent and complimentary with programs managed by other non-Norwegian actors? To what extent has the Program succeeded in leveraging other Norad/ MFA programs and projects?

2. **Balance:** To what extent is the program composition logical and in line with current literature and good practices? To what extent is the portfolio balanced, both in terms of thematic focus areas and geography?

3. **Untapped potential:** To what extent is there untapped potential in the program portfolio?

REVIEW FINDINGS

The Norwegian program to combat marine litter is to a large extent coherent and well-aligned with the policies, priorities, and interventions of a wide range of other relevant actors including global and regional initiatives, national and local governments, and implementing project partners such as NGOs and civil society organizations.

The portfolio demonstrates an even spread of cooperation with various counterparts and partners to reach project objectives, indicating good coverage in terms of involvement of different stakeholder types. There is also an even spread in terms of benefactors targeted by the portfolio projects.

Projects in the marine litter portfolio are found to mostly focus on improving management of plastic waste in partner countries (Outcome 1), and on strengthening global commitments and national and regional instruments (Outcome 4). There is least focus on program Outcome 3, i.e. few partners explicitly target private sector performance with regards to sustainable production, use, and waste management.

The top three waste value chain interventions most represented in the marine litter portfolio are: 1) Enforce/develop international or regional frameworks and regulations; 2) National enabling environment; and 3) Expand waste collection rates.

The portfolio is largely balanced, both in terms of thematic focus areas and geography, with some room for improvement with regards to adherence to current literature. The program composition is to some extent logical and in line with current literature and good practices, however there is room for improvement in particular with regards to geographical target areas as well as where in the waste value chain the program intervenes.

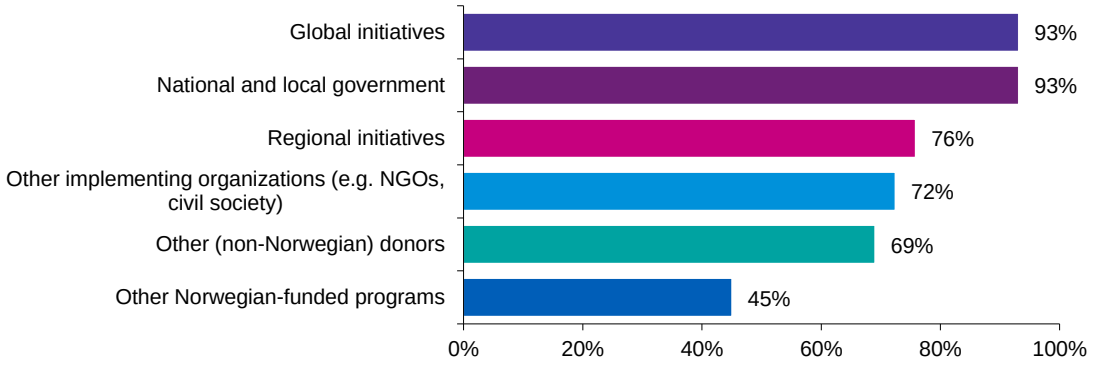
- A comparison with similar development programs of other donor countries to combat marine litter shows that there is overlap in terms of intervention types and geographic focus, but with slight differences in priorities. Relatedly, the marine litter program has to a very limited extent leveraged other Norwegian development programs to achieve results.
- There is untapped potential in the marine litter program. There is firstly potential to increase the focus on countries which generate and export waste, including countries in which significant production and export of plastic products occur. Relatedly, there is space to target interventions further upstream in the waste value chain to tackle plastic pollution at the production stage.
- The review finds that there is least focus on Outcome 3 (12%), i.e. few partners explicitly target private sector performance with regards to sustainable production, use, and waste management.
- The three waste value chain interventions found to be the least represented in the portfolio are predominantly focused in the upstream production side of the value chain, again highlighting untapped potential for the marine litter program: 1) Substitute primary plastics with suitable alternative materials; 2) Design products and packaging for recycling or reuse; and 3) Scale up global capacity of chemical conversion.

4.1.1 Alignment

The Norwegian program to combat marine litter is to a large extent coherent and fits well in its context. Interviews, survey data, and the literature review find that the program largely compliments other interventions in the sector, and that its projects both support and are supported by other interventions in the field. Project partners interviewed commend the marine litter program for having achieved an appropriate and relevant balance in terms of choice of partners and project focus areas. In general, this is reflected also in survey responses in terms of counterparts with which project partners collaborate, stakeholders targeted by projects, alignment with the interventions and policy frameworks of other actors, as well as with related literature and current best practice. Project partners interviewed also noted that they perceive a very high degree of alignment between Norwegian priorities under the program vis-à-vis their own. Many also commented that they feel a high degree of trust and flexibility from Norway in terms of allowing partners to steer the focus of their own projects.

The Norwegian program to combat marine litter and microplastics is well-aligned with the policies, priorities and interventions of a wide range of other relevant actors (Figure 5). 93% of project partners report close alignment with global initiatives as well as with national and local government. There are slightly lower, albeit still relatively high, levels of perceived project alignment with regional initiatives (76%), other implementing organizations (72%), and other non-Norwegian donors (69%). For alignment with private sector actors, see further discussion below.

Figure 5 % of project partners reporting large/ very large degree of alignment with the policies, priorities and interventions of other relevant actors (N=29)



The Program has to a limited extent leveraged other Norwegian development programs and related lessons learned in advancement of the program to combat marine litter and microplastics. 31% of

project partners surveyed report that they simply do not know the level to which they are aligned with other Norwegian development programs. This flags that there is potential for Norway to further leverage its other development programs to enhance mutual awareness of Norwegian-funded development activities, as well as cross-pollination of lessons learned between programs and supported projects. Relatedly, interviews conducted by the review team also finds that, considering that 80% of marine litter comes from land-based sources, the marine litter program could likely benefit from closer collaboration across Norad technical units for optimal leverage of in-house resources and competencies.

The program is to a large extent coherent with and complimentary to programs managed by other non-Norwegian actors, and well-aligned with policy frameworks and interventions of other donors. USAID and Norad have formally recognized this alignment and now collaborate on some initiatives in the Clean Cities, Blue Ocean program (CCBO). Several project partners interviewed note that although donors use many of the same intervention tools, they emphasize different parts of the waste value chain, thus ensuring little overlap. 69% of project partners surveyed also experience that the Norwegian program is closely aligned with non-Norwegian donors to a large or very large extent (Figure 5). See Table 2 for more detailed discussion on coherence and complementarity with other donors working to combat marine litter.

Table 2 Coherence and complementarity with other donors

Coherence and complementarity with other donors
To consider how the Norwegian program is coherent and complimentary with non-Norwegian actors, this review has compared the preferred interventions and geographic focus of other marine litter programs in Appendix 1, with main findings presented here. **A brief analysis of other marine litter programs shows several countries give priority to projects in Asia.** USAID's Local Solutions for Plastic Pollution is active in Viet Nam, as was the recently concluded Municipal Waste Recycling Program, in addition to having projects in Indonesia and the Philippines. Germany partners with ASEAN in Reduce, Reuse, Recycle to Protect the Marine Environment and Coral Reefs (3RProMar), which is also one of the targets in Japan's MARINE initiative. Sweden gave 6 million USD to UN Environment and COBSEA aimed at projects in Southeast Asia, and USAID's Clean Cities, Blue Ocean (CCBO) is divided between Asia and Latin America. Though other countries and regions and mentioned by other projects and programs, lessening the focus on Asia might help distribute funding more evenly. **Another example of stating a geographic focus is Marine:DeFRAG.** Initially, the programs targeted countries "responsible for causing significant inputs of marine litter", although it refrained from mentioning specific countries. In its initial form, the program stated that regional projects should include countries geographically connected by a river or marine region(s). In their most recent call for funding, Marine:DeFRAG expresses particular interest in funding projects for decentralized waste management in rural regions and Small Island Developing States. **In general, the prioritized interventions across the programs and partnerships are similar, and include capacity building for waste management, supporting development and implementation of policy, and some technical support.** In the November 2022 call for funding, Marine:DeFrag states particular interest in funding projects with one of the following focus areas: • Sustainable material alternatives, innovative product design and digitalization throughout the life cycle • Establishment and development of reuse systems • Awareness and behavior change for marine litter prevention • Circular Economy and (decentralized) waste management in rural regions and Small Island Developing States • Avoidance of microplastic inputs into the oceans via various vectors, including water and wastewater management **None of the compared programs prioritize cleanups, and a few are divided on waste-to-energy conversion.** Marine:DeFRAG is wary of in-situ extraction efforts due to its potential harm to biota, and doubtful long-term impact. Like the Norwegian program, cleanup efforts are considered when part of awareness raising. Marine:DeFRAG also states that "in the interests of sustainability, thermal recycling or the incineration of waste cannot generally be funded." This is in contrast with Japan's MARINE Initiative, where waste-to-energy is considered part of introducing "quality environment infrastructure."

4.1.2 Balance

As noted in chapter 2.4 on methodological approach, the KPMG team has identified three sets of tags to categorize projects in the Portfolio Analysis Tool and to ascertain focus of portfolio, as well as thematic and geographical balance:

- **Tag set #1: the four program Outcomes** to identify the spread and saturation of projects across the four outcomes of the program result framework (see Figure 4 for full framework).
- **Tag set #2: 11 waste value chain interventions**[12] inspired by Systemiq's 'System interventions'[13] and adapted to better reflect a comprehensive development program to combat marine litter.
- **Tag set #3: four activity types** intended to capture the activities via which to intervene in the waste value chain under a development program to combat marine litter.

By deploying this approach, the review team seeks to both categorize and measure the Norwegian marine litter program along the lines of its own identified priorities, but also along the parameters of a comprehensive development program to combat marine litter and microplastics. This approach is intended to allow KPMG to assess how the Norwegian program is performing against its own objectives, as well as to identify where it falls across a comprehensive set of waste value chain interventions and activity types to identify gaps and untapped potential. The goal is to produce an analysis of what the program *currently is* as well as what it *could be*.

4.1.2.1 Balance: Program Outcomes

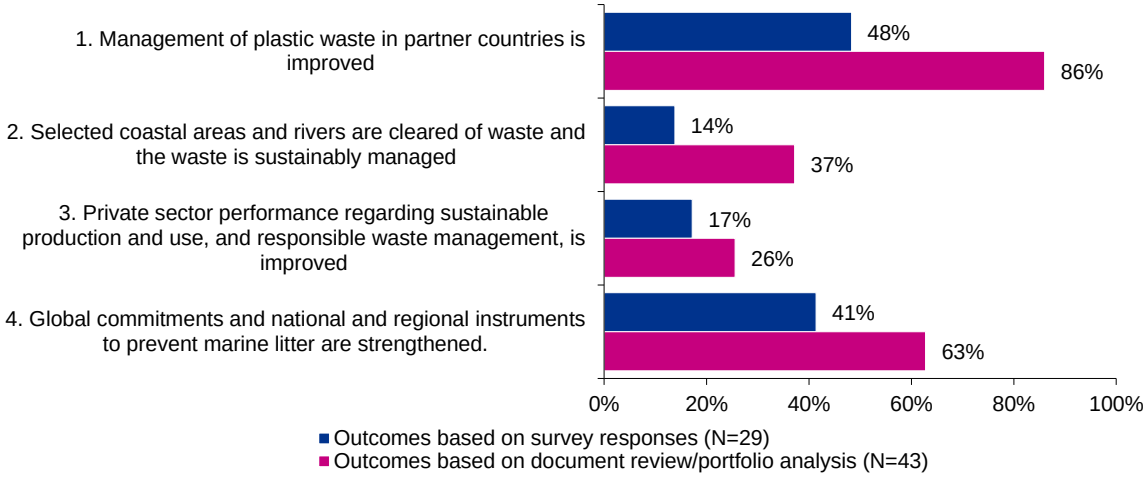
Figure 6 The four program outcomes

The KPMG team received progress reporting for 44 of the 47 projects in the portfolio. Through review of project documentation and use of the Portfolio Analysis Tool were able to tag 43 projects (for which project documentation was available) under the portfolio according to which of the four program outcomes they address. Some projects address only one outcome, while many address two, three or all four in some capacity or another. Likewise, survey respondents were asked to respond to whether their projects addressed each outcome to a limited, some or large extent, not at all, or if they did not know. Figure 7 shows the survey results alongside KPMG's document review and provides a visual representation of where the weight of the portfolio lies in terms of focus on the four outcomes across projects.

[12] See Appendix 1: Literature review for a detailed description of waste system value chains and interventions.

[13] Pew Charitable Trusts and SYSTEMIQ (2020) "Breaking the Plastic Wave."

Figure 7 % of project partners with very large contributions to the four program Outcomes, by project partners surveyed (N=29) and document review (N=43)



Almost all projects under the marine litter portfolio address Outcomes 1 (86%) and 4 (63%) of the program results framework. As such, projects mostly focus on improving management of plastic waste in partner countries, and on strengthening global commitments and national and regional instruments. Only 37% of projects are found to address Outcome 2, with lowest contributions being to Outcome 3 at 26%. The relative difference between the outcome areas is in line with review findings from the surveys, interviews, and country case studies. The project partner survey shows that 48% and 41% of partners report to make very large contributions to Outcomes 1 and 4, respectively (Figure 7). Contributions to Outcome 2 and 3 are again here found to be low, at 14% and 17%, respectively. The country case studies also found that few program partners include clean-ups as a key project activity, with notable exceptions Afroz Shah in India and EcoNusa in Indonesia (the latter of which was finalized in 2020).

The document review finds that there is least focus on program Outcome 3 (26%), i.e. few partners explicitly target private sector performance with regards to sustainable production, use, and waste management (Figure 7). This low contribution is also reflected in the project partner survey responses in which only 17% report to make very large contributions to Outcome 3. This finding is contrasted by another survey finding, in which 69% of project partners say they both cooperate with the private sector to reach their objectives and target the private sector as a benefactor of their work. This conflicting finding reflects both prior external evaluations commissioned by Norad on private sector collaboration, as well as studies conducted on the matter internally by Norad.

There thus seems to be a disconnect between how Norway has envisioned targeting the private sector under the marine litter program, and how project partners understand private sector collaboration under their projects in practice. It is difficult to infer the driver(s) behind this discrepancy. It might indicate that Outcome 3 does not accurately reflect how partners work with the private sector in practice. It seems that partners may benefit from a guiding framework about how Norway envisages the role of the private sector in the program. This would both serve as a tool for partner organizations to identify the right private sector players to collaborate with, and likely also increase the degree of coherence across the four outcomes of the program results framework.

See Table 3 below for a heatmap presenting the saturation of projects focusing on the four respective program outcomes sorted by geographical area, based on the document review using the Portfolio Analysis Tool. The table shows the number of projects focusing on the related outcomes in each country – the darker the color the more projects.

- ✓ **Outcome 1** is most focused on in Indonesia (8), the global projects (7) and India (6)
- ✓ **Outcome 2** is most represented in Indonesia (5)
- ✓ **Outcome 3** is more prominent in Bangladesh (2), India (2), Viet Nam (2) and in global projects (2)
- ✓ **Outcome 4** is unsurprisingly most pronounced in global projects (8), as well as in Indonesia (6).

Table 3 Heatmap of project activity by country and program outcome

Geography	Outcome 1 Improved plastic waste management	Outcome 2 Cleared coastal areas and rivers	Outcome 3 Improved private sector performance	Outcome 4 Strengthened global commitments
Bangladesh	2		2	
Brazil				1
China	2	1	1	1
Ghana	1		1	
India	6	3	2	3
Indonesia	8	5		6
Kenya	1	1		
Lebanon	1	1		
Morocco	1			1
Mozambique	1	1		
Myanmar	1	1	1	
South Africa	1	1		
Sri Lanka	1		1	
Viet Nam	3	2	2	1
Regional Africa	1		1	3
Regional Asia	2		1	3
Regional Caribbean	1	1		1
Regional Pacific Islands	1		1	2
Regional Polar	1			1
Global focus	7	1	2	8

The portfolio demonstrates an even spread of collaboration with various counterparts and partners to reach project objectives (Figure 8, Figure 9), indicating good coverage in terms of involvement of different stakeholder types. The majority of projects surveyed work with national governments (83%) to achieve their objectives, followed by civil society (72%), local government (69%) and local populations (66%). This is logical when compared with both the document review findings using the Portfolio Analysis Tool, as well as survey responses, to identify waste value chain interventions targeted by projects. See Chapter 4.1.2.2 below for further analysis on this. Collaboration with the private sector is discussed above.

There is a similarly even spread in terms of benefactors targeted by the portfolio, as project partners report to mostly target national governments (79%), local populations (79%) and local government (76%) (Figure 9). This is in line with project activities as identified through document review using the Portfolio Analysis Tool, as the more common interventions tend to focus on national and local government policy and regulatory support and capacity-building, as well as awareness-raising and behavioral change. A second group of benefactors consisting of informal sector (62%), civil society (69%), and the private sector (69%) are also reported benefactors of project activities. While funding clean-ups and advocacy in the sector speak to the two former, building on the aforementioned point, how activities are of benefit and use to the private sector is unclear; there may confusion between partnership development and tangible outcomes that support private sector interventions across waste management value chains.

Figure 8 % of project partners reporting to collaborate with relevant counterparts and partners to reach project objectives (N=29)

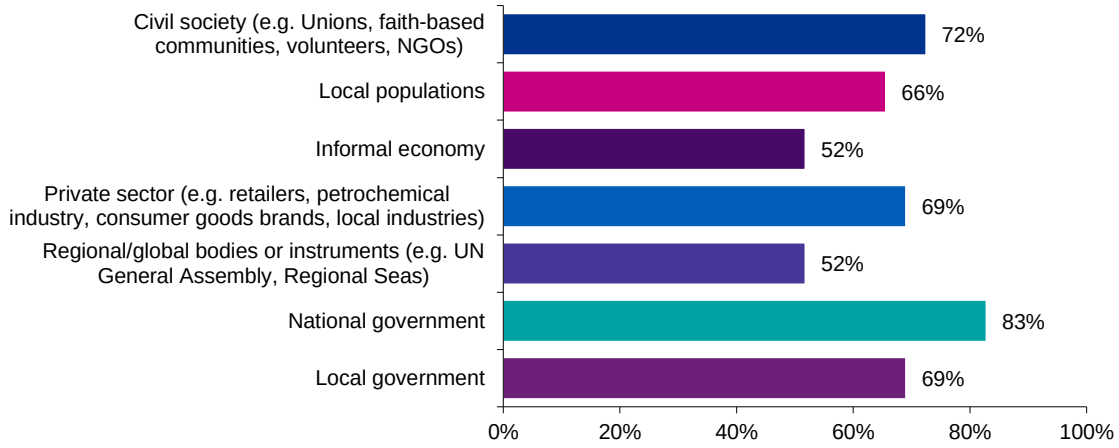
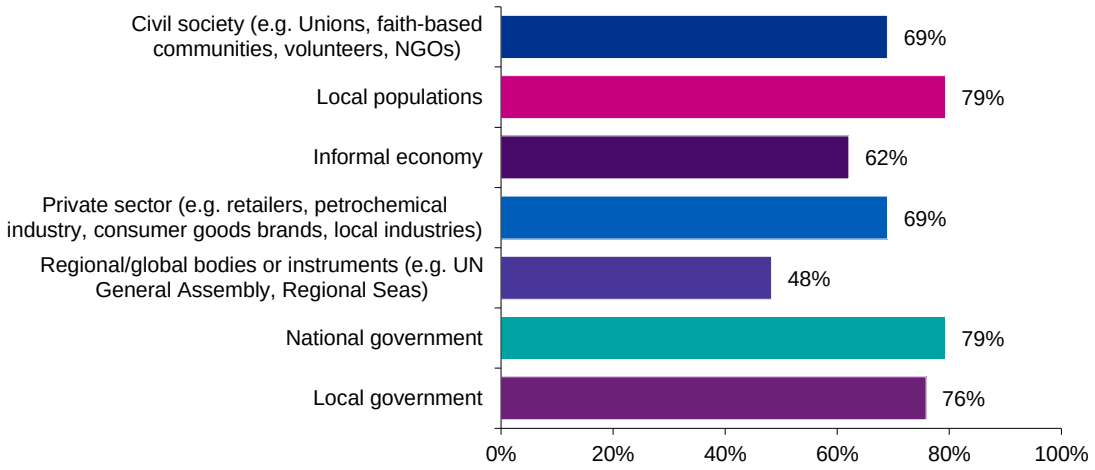
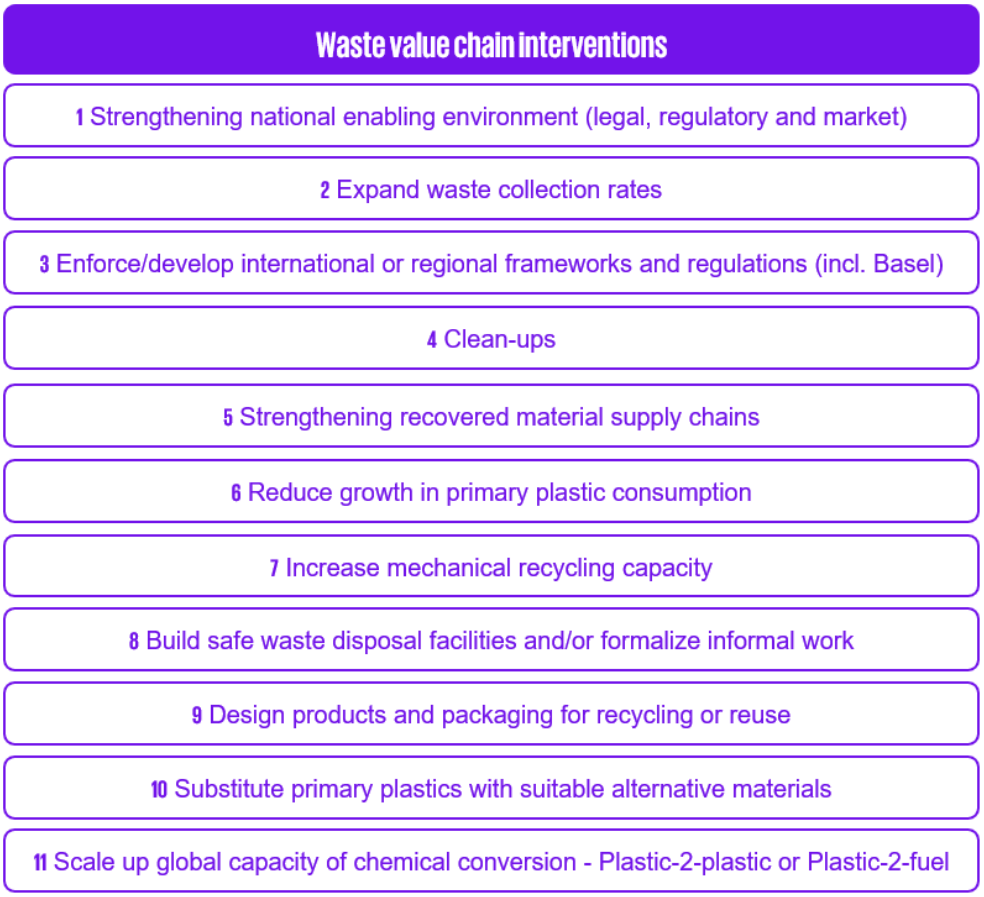


Figure 9 % of project partners reporting to target the following actors as benefactors of their projects (N=29)



4.1.2.2 Balance: Waste value chain interventions and activity types

Figure 10 Waste value chain interventions



The portfolio is to a moderate extent balanced across the identified 11 waste value chain interventions. When comparing project partner survey responses with findings from the document review using the Portfolio Analysis Tool, the review team finds both consistencies and discrepancies between the waste value chain interventions partners claim to be making large contributions to vs what their project documentation shows.

Where the project partners themselves report a more balanced spread of waste value chain interventions, the document review and intervention tagging exercise finds that there is a clear emphasis on some interventions over others in the portfolio, highlighting certain gaps. Figure 11 presents the comparison of project partner responses vis-à-vis the findings of the document review and tagging. Note that 29 project partners responded to the survey, and that documentation sufficient for tagging was available for 42 projects, making the document review and tagging the most representative sample for this assessment.

In the aggregate and in terms of consistencies between what project partners report and what the document review finds, the analysis finds that the top three waste value chain interventions most represented in the marine litter portfolio are:

1. Enforce/develop international or regional frameworks and regulations (including Basel)
2. National enabling environment (legal, regulatory and market strengthening)
3. Expand waste collection rates

This finding is in line with the review finding that most projects either focus their efforts on program Outcome 1 *Management of waste in partner countries is improved* **and Outcome 4** *Global commitments and national and regional instruments to prevent marine litter are strengthened*.

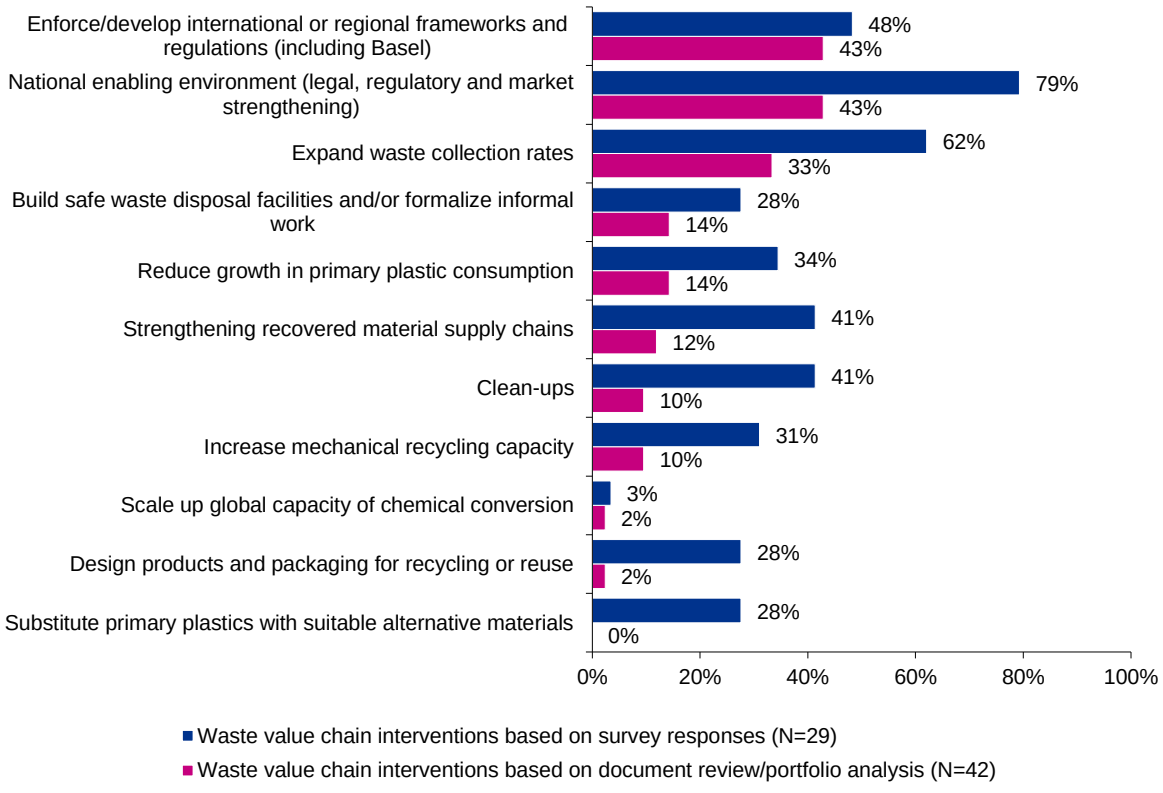
The bottom three waste value chain interventions found to be the least represented in the portfolio, highlighting one where there might be untapped potential for the marine litter program are predominantly focused in the upstream production side of the waste value chain:

1. Substitute primary plastics with suitable alternative materials
2. Design products and packaging for recycling or reuse
3. Scale up global capacity of chemical conversion

As it could be argued that bottom intervention 1 and 2 here relate to collaboration with the private sector, this finding is also in line with the review finding that very few projects focus on program Outcome 3 *Private sector performance regarding sustainable production and use, and responsible waste management, is improved*. Program **Outcome 2** *Selected coastal areas and rivers are cleared of waste and the waste is sustainably managed*, represented in the waste value chain interventions as *Clean-ups*, also does not emerge as a prioritized intervention by projects. This is also in line with other review findings.

In terms of discrepancies between what project partners report and what the document review finds, project partners in general tend to report greater contributions to all waste value chain interventions than the review team identified through the document review. This might e.g. be due to projects overestimating their contribution or exaggerating their field of intervention; that project documentation and progress reports do not adequately capture actual activities; or it might be an effect of the smaller sample size of survey vis-à-vis documents reviewed.

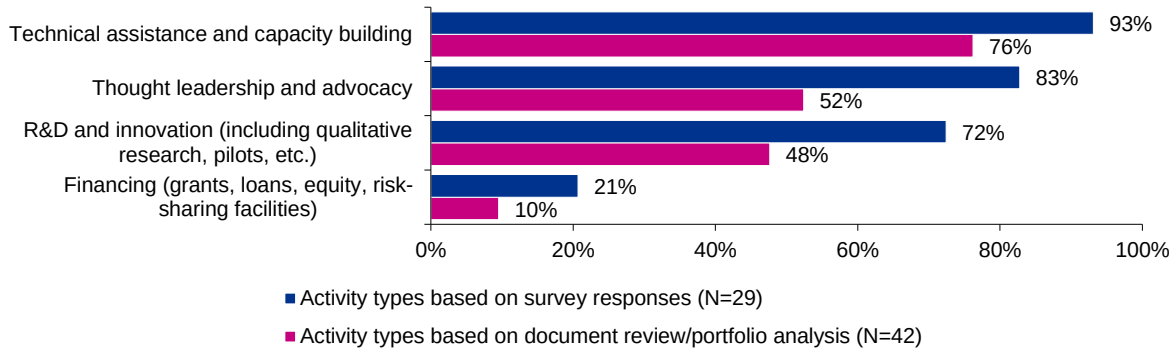
Figure 11 % of projects identified or reporting to make large/very large contributions to the following waste value chain interventions to combat marine litter and microplastics



The program to a large extent strikes an appropriate balance between activity types within the overall program and projects to ensure delivery of results. The review has again conducted a tagging exercise of project documentation through the Portfolio Analysis Tool and compared the results to the project partner survey responses to gain a comprehensive understanding of the activities via which project partners intervene in the waste value chain. Here, the findings of the document review and project partner survey are to a greater extent aligned (Figure 12). To prevent and significantly reduce marine pollution it is clear that projects under the Norwegian marine litter portfolio, in prioritized order:

1. Firstly, conduct capacity building and provide technical assistance to counterparts
2. Secondly, engage in advocacy and in activities to develop knowledge through thought leadership
3. Thirdly, conduct research and development (R&D) and innovation work including pilots and qualitative research
4. And lastly, include a financing component in their work, predominantly through multilateral initiatives such as the World Bank PROBLUE.

Figure 12 % of projects identified or reporting to deploy to a large/very large extent the following activity types to intervene in the waste value chain to combat marine litter and microplastics



4.1.3 Untapped potential in portfolio

The analysis above on alignment, balance and current literature finds that there is untapped potential in the program portfolio to some extent.

The program composition is logical and to some extent in line with current literature and best practice. At the program inception in 2018, the program logic reflected current consensus and literature available. Given the maturation of the field since, there is now potential to reframe the program logic to ensure a targeted approach more in line with current best practice.

There is firstly potential to expand or reframe the geographical focus to include countries which generate and export waste in addition to the countries in which large swathes of plastic waste accumulates and makes itself most visible. In July 2022, the Ocean Conservancy, a US-based environmental advocacy group, issued an apology for their report *Stemming the Tide*. The report built upon the same Jambeck et al. study in which the authors modeled The Phillippines, China, Indonesia, Vietnam

and Thailand to have the greatest waste inputs to the ocean. In their apology, the Ocean Conservancy noted that:

> *"by focusing so narrowly on one region of the world (East and Southeast Asia), we created a narrative about who is responsible for the ocean plastic pollution crisis – one that failed to acknowledge the outsized role that developed countries, especially the United States, have played and continue to play in generating and exporting plastic waste to this very region."*[14]

In their apology, the Ocean Conservancy pointed to peer-reviewed articles that have informed their recent advocacy, and that could inform this reframing. In one of them, Kara Lavender Law (co-author both the 2010- and 2015- studies along with Jambeck and others) brings important nuances to how one should read the 2015-study.[15] She reminds readers that the lack of harmonized and standardized reporting methodologies may introduce biases and errors in global comparative analyses of plastic inputs. These models are indeed useful tools, but may be better suited for establishing a baseline understanding of solid waste generation and management *within* a country.

Though focusing on populous countries with poor waste management systems remains relevant, the program's geographic focus might be reframed in order to take into account recent literature. Some survey respondents also envision geographical expansion, in which case allowing them to target their preferred geography for the remaining program years can prove beneficial.

Secondly, there is space to refocus the program to target interventions more upstream in the waste value chain such as designing products for reuse, reducing primary plastic consumption, or substituting primary plastics for suitable alternatives. In terms of waste value chain intervention types, Lau et al. found that even when implementing all feasible interventions to reduce pollution, huge quantities of plastic will still accumulate in the environment.[16] In their view "coordinated global action is urgently needed to reduce plastic consumption" in addition to increasing rates of reuse, waste collection, and recycling; expanding safe disposal systems; and accelerating innovation in the plastic value chain.

52% of project partners also consider that there is untapped potential in their projects to a large/ very large extent, with partners also highlighting the need to work with private sector to focus efforts upstream in the waste value chain. One interviewed project partner expressed a desire to eliminate the "consumer focused shame-game". They pointed out that by creating specific solutions – in particular, sachets – to break into new markets producers have created a problem which cannot be solved by consumers.

The findings of the document analysis and tagging of projects against the 11 waste value chain interventions again find the same need to focus upstream by targeting the private sector. The bottom three waste value chain interventions found to be the least represented in the portfolio, highlighting where there is untapped potential for the marine litter program, are predominantly focused in the upstream production side of the waste value chain:

1. Substitution of primary plastics with suitable alternative materials
2. Designing products and packaging for recycling or reuse
3. Scaling up global capacity of chemical conversion

Bottom intervention 1 and 2 here relate to collaboration with the private sector, a finding which is also in line with the review finding that very few projects focus on program Outcome 3 *Private sector performance regarding sustainable production and use, and responsible waste management, is improved*.

[14] Stemming The tide statement of accountability. Ocean Conservancy. (2022, July 10). Retrieved October 3rd, 2022, from https://oceanconservancy.org/trash-free-seas/take-deep-dive/stemming-the-tide/

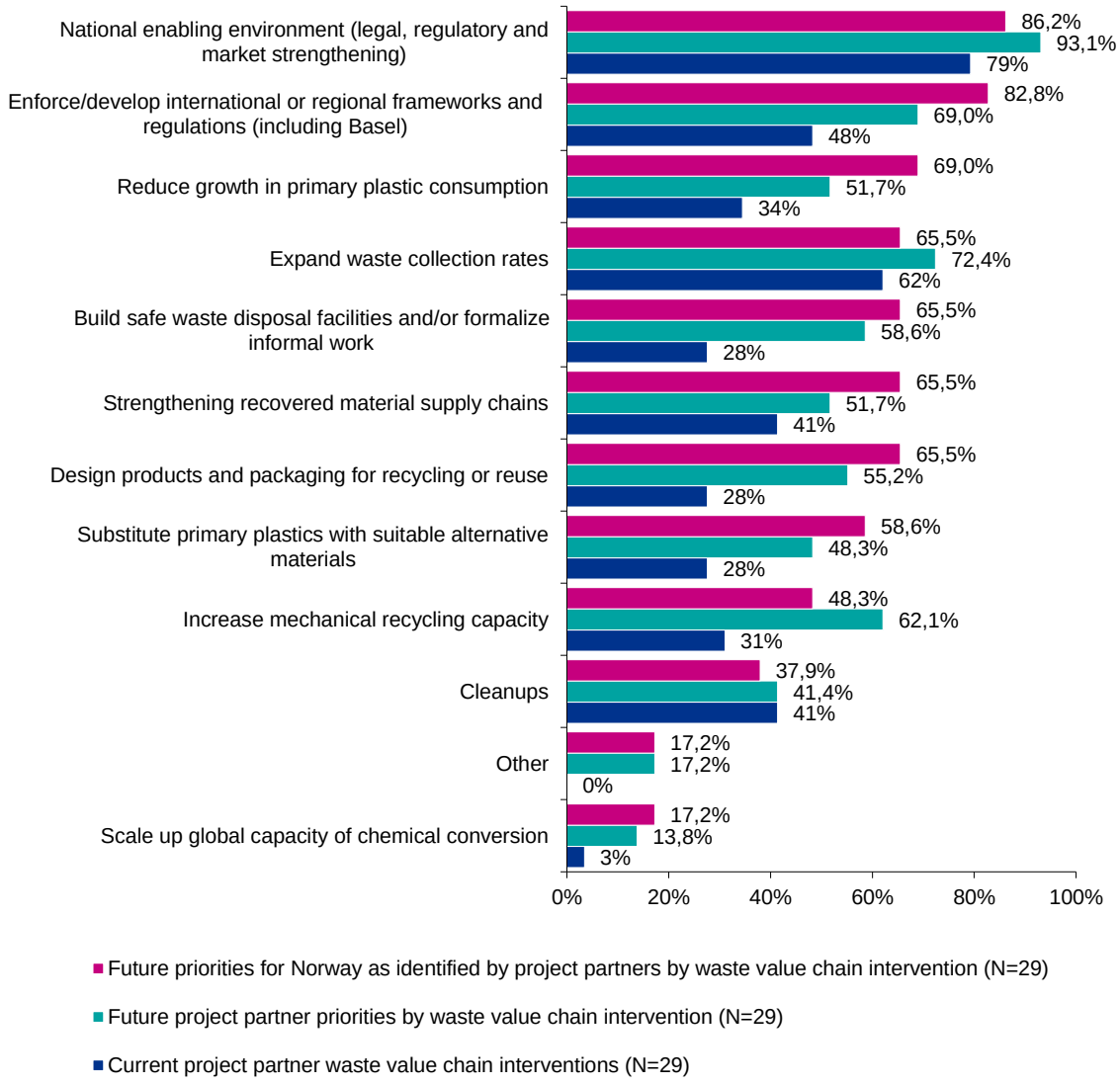
[15] Law et al. "The United States' contribution of plastic waste to land and ocean." Science advances vol. 6,44 eabd0288. 30 Oct. 2020.

[16] Lau et al. "Evaluating scenarios toward zero plastic pollution." Science vol. 369, no. 6510. 23 Jul. 2020.

Based on the analysis to come below, bottom intervention 3 is considered by the review as rightly not prioritized by the Norwegian marine litter program.

The review team has also conducted an analysis of current waste value chain interventions targeted under the program vs future potential, by asking project partners which interventions they currently work on, which they will prioritize in the future, and which they would propose for Norway to prioritize in the future (13).

Figure 13 Current waste value chain interventions vs future potential, % of project partners surveyed



There is overlap between the waste value chain interventions project partners wish to prioritize in the future and the interventions they see as key future priorities for Norway. This assessment is based on an analysis of where there is the largest gap (>20% increase) between the current focus on waste value chain interventions by project partners and 1) their future priorities and 2) their proposed future priorities for Norway. For the remaining interventions, the intensity of focus remains relatively constant (with

an increase or decrease of <20%). Table 4 shows the top six interventions emerging for each group. Overlapping interventions are color coded to show where future synergies might lie.

Table 4 Top six future priorities based on project partner survey responses

	Top six future priorities for project partners:	Top six potential future priorities for Norway:
1.	Increase mechanical recycling capacity (31%)	Design products and packaging for recycling or reuse (38%)
2.	Build safe waste disposal facilities and/or formalize informal work (31%)	Build safe waste disposal facilities and/or formalize informal work (38%)
3.	Design products and packaging for recycling or reuse (28%)	Reduce growth in primary plastic consumption (35%)
4.	Substitute primary plastics with suitable alternative materials (21%)	Enforce/develop international or regional frameworks and regulations (incl. Basel) (35%)
5.	Enforce/develop international or regional frameworks and regulations (incl. Basel) (21%)	Substitute primary plastics with suitable alternative materials (31%)
6.	Reduce growth in primary plastic consumption (17%)	Strengthening recovered material supply chains (24%)

The emerging finding of this analysis on potential future priorities again shows a strong emphasis on upstream waste value chain interventions which target the private sector on the producer side. Project partners e.g. see a role for Norway to prioritize support to design of products and packaging for recycling or reuse; reductions of primary plastic consumption; and substitution of primary plastics with suitable alternative materials.

Building safe waste disposal facilities and/or formalizing informal work is also highlighted as another potential future priority area for Norway emerging through this analysis, an area which is in line with the overarching goal of Norwegian development aid to reduce poverty. With regards to formalization of informal work, Norway should take an approach in line with best practice focusing on enhancing the role of informal workers in the recycling sector as indispensable partners in bolstering a circular economy to combat plastic pollution. The review team finds that project partners under the marine litter portfolio e.g. in India increasingly take this approach with high degrees of success, as evidenced by the work of the INOPOL project as run by NIVA and partners (box below).

The analysis also finds continued added value (i.e. similar current and future priority levels) for Norway in terms of supporting national enabling environments. It also strongly points to (35% increase) enforcing/enabling international/ regional frameworks and regulations as an area of increased potential priority for Norway going forward.

Results Story: Norwegian Institute for Water Research (NIVA) – India-Norway Cooperation Project on Capacity Building for Reducing Plastic and Chemical Pollution in India

The INOPOL project is run by NIVA, Mu Gamma Consultants, TERI, Toxics Link, SRM and CIPET. The project focuses on the maritime and industrial state of Gujarat, where rapid industrialization and urbanization have contributed to making the state one of the most polluted in India. Through the INOPOL project, Surat Municipal Committee has taken initiatives to include the informal sector as part of waste management teams. This can be developed as a replicable model for other municipal committees. The informal sector should be integrated and not isolated as part of Just Transition. Thus, the INOPOL project looks at the social dimension of waste management and contributes to dignified and safe working conditions.

INOPOL has also played a significant role in identification and acceptance of issues and measures related to marine litter in amendments of existing policies and schemes in India. CIPET e.g. played a major role in advocacy for single use plastic ban in India. The data and research produced by this project has fed into design of solutions to combat marine litter.

Capacity building of manpower and young students has helped to promote research and foster a culture of knowledge dissemination across participants and beneficiaries. Exposure to such international projects has provided motivation and induced significant participation from diverse stakeholders as well as awareness raising in the wider society. Skill development in the domain of microplastic analysis has also occurred.

On the lines of sustainability, the INOPOL project has triggered many other projects. Other interviewed project partners, while discussing INOPOL findings and results, noted that there is a need for such projects in the region. Hence the impact of this project has also been acknowledged in international forums.

4.1.3.1 Potential future focus areas

The above analysis identifies several areas of untapped potential in the Norwegian marine litter program. Within these, the review team has identified key areas which it considers likely more impactful channels for future support. Circular economy, and in particular waste value chain interventions targeting the private sector in the upstream, is identified as a key area on which Norway should put greater emphasis in the marine litter program going forward. However, the analysis also finds continued added value of Norway supporting national enabling environments, as well as strong potential for increased prioritization of enforcing/ enabling international/ regional frameworks and regulations. With the Norwegian marine litter program being a development program, however, it might face difficulties in terms of targeting the private sector directly under ODA guidelines.

As such, the identified gaps with regards to upstream, production side waste value chain interventions may be addressed by deploying a set of strategies. Firstly, Norway can support projects targeting decision-makers in relevant ODA countries, as well as multilateral organizations and global initiatives, to strengthen national and global enabling environments facilitating a circular economy approach, including regulations directly targeting the private sector such as on EPR. Enabling environment support is typically executed through government-to-government (G2G) or multilateral technical assistance programs. As such, there is likely scope for Norway to indirectly target private sector upstream initiatives through such policy-oriented avenues. Secondly, Norway can support projects actively engaging with the private sector to prepare them for efficient adaptation to relevant new regulations and for taking extended responsibility as producers of plastic products.

An alternative approach would be to finance private sector companies acting as "first movers" working on selected priority waste value chain interventions. These "first movers," by nature, are helping to build market linkages, working with local lenders to access capital, address regulatory roadblocks etc., inadvertently working to create a more conducive enabling environment in the sector but, as first

movers, typically require risk-reducing measures to enter or scale their activities. Entry and/or scale is then easier for the next generation of companies working in this space, who gain an advantage from some of the barriers knocked down and/or addressed by first movers.

Norway could also build further on a circular economy approach by supporting projects targeting key waste value chain interventions, such as:

1. **Reduction in growth in primary plastic:** The growth in plastics production we will only achieve a 7% reduction in plastic emissions compared to Business-as-Usual, despite current efforts.[1] The plastics industry as a whole is also highly reliant on finite stocks of oil and gas, which take up more than 90% of its feedstock.[1] Addressing reductions in primary plastic use requires engaging with upstream consumer brands and private companies producing plastics, as well as the underpinning policy frameworks like EPR schemes that incentivize reduction in primary feedstock.

2. **Product and packaging redesign for recycling:** Plastic packaging represents 26% of the total volume of plastics used, and the recycling rate for plastic packaging, when compared to other waste sources, are far below the global recycling rates for paper (58%) and iron and steel (70–90%).[1] Similar to the aforementioned area, designing products and packaging for recycling would require engaging with upstream consumer brands and private companies, or with policy fora and frameworks working to implement industrially compostable plastic packaging or enhancing recycling pathways in emerging markets e.g. the European Commission's recently adopted Circular Economy package includes targets to increase plastic packaging recycling to 55%.[1]

3. **The expansion of waste collection rates:** Waste collection in emerging markets is challenging due to municipal government resource constraints (often comprising 20%–50% of municipal budgets).[1] Given this context, to expand collection in a sustainable way requires a public service component by working with local governments, or a financial incentive on the part of (and often informal) collectors and waste aggregators (and ideally, both).

4. **Strengthening the supply of recovered materials:** While boosting collection rates and recycling rates is critical, ensuring there is a market for their purchase requires support to boost the level of re-integration/circularity across waste value chains. Working across the value chain, from upstream to downstream players, on a combination of redesign and innovation in business models, alternative and replicable materials, packaging design, and reprocessing technologies all are important considerations in reuse models that boost circularity and material circulation.[1]

5. **Building safe waste disposal facilities:** Related to the expansion of collection rates, in low-income countries, over 90% of waste is often disposed in unregulated dumps or openly burned, creating serious health, safety, and environmental consequences.[1] Supporting waste management systems, an essential municipal service, requires working on integrated systems that are efficient, sustainable, and socially supported with local governments.

Review findings also suggest that there is potential for Norway to better leverage their competitive advantage when it comes to oceans management. Interviewees in Indonesia e.g. noted that the marine litter program would benefit from leveraging the Norwegian Oceans for Development program to help partner countries integrate marine spatial planning into waste management on land and integrate their ocean and coastal management plans. Finally, one multilateral project partner in Indonesia proposed that Norway should use its competitive advantage at sea to address the 20% of marine litter stemming from sea-based sources.

Finally, and on the more general note, some project partner interviewees expressed the need for more evidence generation in the marine litter sphere, stating their wish for Norway to support more scientific research on the causes of and potential solutions to the marine litter problem. This both to form the foundation of data to underpin future interventions, but also to identify methodologies to better measure program progress. The partners expressed that there are currently so many actors working on policy development that this "market" is quickly becoming saturated and developing an ever-growing need for a solid evidence base to work from.

4.2 Effectiveness – is the program achieving its objectives?

REVIEW FRAMEWORK

The framework for the review of effectiveness is:

1. **Results measurement across portfolio:** To what extent is the program in line with the current literature and practices? To what extent is the program results framework adequate to capture results? How are project results aggregated to assess the overall impact of the program?

2. **Results tracking:** To what extent are project partners tracking results? To what extent are project results frameworks and indicators relevant, useful and SMART (Specific, Measurable, Attainable, Relevant and Timely)? To what extent are project plans realistic?

3. **Results achievement:** To what extent is the program on track to meet or exceed overall objectives? To what extent has the program contributed to the process and negotiations towards the new global agreement to combat marine litter and plastic pollution? To what extent is the program mobilizing additional investments and contributions?

4. **Learning:** To what extent do partners plan and conduct evaluations to assess the impact of project activities? To what extent is the program sharing lessons learned and facilitating collaboration across projects and other key partners? How does learning feed back into ongoing program development?

REVIEW FINDINGS

53% of project partners are assessed to have achieved their set targets at the time of this review, while 39% have done so to some extent. Only 8% of the project partners are assessed to not have achieved their set targets at all.

KPMG considers that the marine litter program has likely made moderate-to-large contributions towards its main objective to prevent and significantly reduce marine pollution. The review also finds that the program contributes to raising the awareness of both decision-makers and the public with regards to the importance of combating marine litter and plastic pollution.

The highest levels of project target achievement across waste value chain interventions can be found in projects implementing key interventions identified as well-represented in the portfolio, indicating that the interventions as they are currently represented in the program are effective to a moderate-to-large degree.

Target achievement towards the Outcomes 1, 2 and 4 of the marine litter program is relatively equal (47-52%), with the exception of Outcome 3 which has seen lower levels of attainment (27%). This is measured as the share of projects addressing a given outcome reporting results achievement in line with set targets

Achievement against set targets is higher and relatively equal in projects deploying activity types Thought leadership and advocacy at 55%, Technical assistance and capacity building at 52% and R&D and innovation at 50%. Among projects deploying activity Financing, no projects report results achievement in line with set targets.

The program has to some extent made contributions to the process and negotiations towards the new global agreement to combat marine litter and plastic pollution, and to a large extent influenced the contents of the negotiating mandate, like securing particular wording about the role of the informal sector.

- The program to a limited extent mobilizes additional investments and other contributions from development partners and the private sector. However, as an early funder to the marine litter sector Norway has acted as a trailblazer for other donors to follow suit.
- Project partners are generally tracking results in a qualitative manner, and project-level results frameworks and indicators are to some extent relevant and useful. Project plans and schedule for achieving targets are to a moderate extent realistic and based on evidence, with some room for improvement. Program outcomes and related outputs are not found to be SMART (Specific, Measurable, Attainable, Relevant and Timely), however some project indicators are.
- Projects are to a very large extent planning to conduct, or have conducted, evaluations to assess the effect of activities, but there is limited evidence that an effective learning feedback mechanism exists for the ongoing development of the program. The program is found to some extent to be sharing lessons learned and facilitating collaboration among projects and key partners, but some partners wish for more formal learning mechanisms.
- The program RBM system, including the results framework, is not adequate to capture results in line with the outcomes and impact of the program. Reporting data collected through the program RBM system is thus not suitable for aggregation across the portfolio. Due to the lack of standardized indicators and quantitative reporting, it is therefore not possible to assess e.g. how the different project types compare in terms of cost efficiency, mobilization and impact on beneficiaries.

4.2.1 Results tracking

4.2.1.1 Background to quantitative results tracking

In order to obtain a summarized perspective of projects in the marine litter portfolio, aggregation of all project results is required. To properly aggregate results, there needs to be at least a standardized framework for assessing the extent to which the project has achieved its objectives, in a measurable format. For most projects in the portfolio, this is not available.

In order to track the performance of the projects, the projects' reporting also needs to include quantitative targets in line with the results framework. The KPMG team received progress reporting for 44 of the 47 projects in the portfolio.[17] Of those, nine projects (20%) have results frameworks and reporting with quantifiable indicators lending themselves to effective measurement.

The projects without quantifiable indicators often have targets that are qualitative in nature, lack specific value targets or lack timeframes for completion. Examples include but are not limited to:

Partner	Project	Objective	Indicator	Issue
Brazilian Biodiversity Fund (Funbio) and the University in São Paulo	Building knowledge to Combat Marine Litter	Consolidated and engaged network of stakeholders gathering and sharing information on marine litter	*Quantity of contributions of data to the online database during implementation*	No target value
Organisation of Eastern Caribbean States Commission (OECS)	Building Resilience in the Eastern Caribbean through Reduction of Marine	(Not specified)	*Indicator 2: Reduction in marine litter in the OECS*	No timeframe

[17] Missing reports for CEAN (Cooperativa de Educacao Ambiental Ntumbuluku): Establishment of a Programme on Marine Litter and Microplastics; IMO: Safe and environmentally sound ship recycling in Bangladesh, SENREC III; and USAID: Clean Cities Blue Oceans (CCBO).

Partner	Project	Objective	Indicator	Issue
	Litter and Pollution (ReMLiT)			
Norwegian Institute for Water Research (NIVA)	India-Norway Cooperation Project on Capacity Building for Reducing Plastic and Chemical Pollution in India (INOPOL)	Outcome 1.5: Increased capacity and awareness on plastic pollution and sound management in India	*Stakeholders responsible for reducing plastic pollution are making plans and starting measures*	Qualitative indicator

Projects reporting data insufficient for aggregation either lack targets, reporting against targets or have only qualitative descriptions of progress without a quantitative status against targets.
Examples include but are not limited to:

Partner	Project	Indicator	Progress Report
IUCN	Plastic Waste Free Islands	2.1 Current waste management policies and practices assessed on target SIDS to generate a baseline understanding on content, financing and implementation of policies related to project outcome. Number of national policy assessment to assess current gaps in the waste management policies and practices. **Target final: 6 assessments completed (1 per country)**	**(Amber colour code to denote "In progress")**
GRID Arendal	GRID-Arendal Programme support	Output 1.4 Compilation of major outcomes and progress achieved in developing policy through the previous UNEA Resolutions on marine plastic litter and microplastics **Target 2019 = 1 compilation**	*"Ongoing work on compilation and communication of UNEA resolutions in 2020 is being supported by the Ministry of Climate and Environment."* **(Qualitative only)**

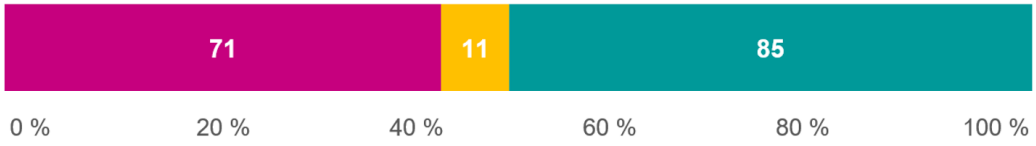
4.2.1.2 Findings from the quantitative results tracking

For the nine projects with sufficient measurable data, the review team has analyzed findings from project result reports for 2020, 2021 and 2022[18] against their targets as set out in the agreement results frameworks. This gives a total of 167 indicators across the nine projects (see appendix 6 for list). Each indicator has been classified based on its achievement relative to the target for that specific year:

< 69% Red	70% - 99% Amber	100% > Green

[18] Depending on the most recent year available among shared project progress reports.

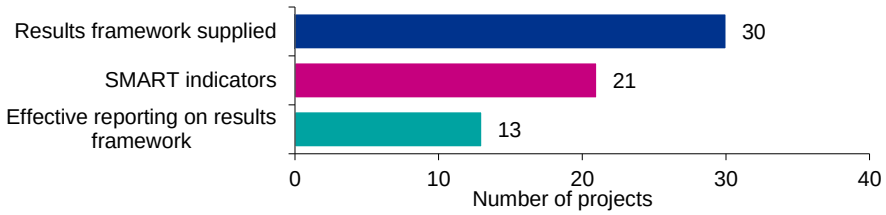
Out of 167 indicators, 71 were classified as red, 11 as amber, and 85 as green:



4.2.1.3 Quantitative results tracking at project level

Although projects generally supply results frameworks with their project applications and most report on these, there is room for improvement with regards to quality of indicators and related reporting. The portfolio analysis conducted by the KPMG reporting team finds that while 30 projects (68% of 44 projects assessed) supply adequate results frameworks with their project documentation, only 21 projects (48%) have indicators which are SMART, and fewer still, at only 13 projects (30%), are found to be reporting effectively, i.e. with accuracy and consistency, on the results frameworks which they have supplied (Figure 14 below). See appendix 6 for an overview of the relevant projects. The most significant shortfall found across the project results frameworks is the regular lack of set targets in measurable terms, as well as insufficient consideration given to baselines and means of verification, creating challenges to progress as projects advance. SYSTEMIQ's project Stop Ocean Plastics (STOP) is one of the projects which supplied an adequate results framework, has SMART indicators, and which reports effectively on the results framework provided. An example of results as achieved by STOP can be found on the next page.

Figure 14 Quality of project RBM system and reporting (N=44)



Project partners are to a large extent tracking results and project-level results frameworks and indicators are to an extent relevant and useful. 79% of project partners surveyed express that they are to a large or very large extent able to capture and report results using their results frameworks agreed with Norway. However, the document review reveals that tracking of results is not done in a systematic way across the portfolio and results from the different projects cannot be aggregated to allow for assessment of the overall effect of the program. The highly qualitative nature of reporting also makes program level aggregation almost impossible without second-level qualitative processing. This could be solved by creating overarching quantitative program indicators based on main portfolio activities against which project indicators could report directly or be linked.

The review team considers that baseline- and target setting should be improved across the portfolio, as projects display very varying quality in this regard. On the one hand, 93% of project partners surveyed report that their targets as stated in project results frameworks can be considered realistic and based on evidence to a large or very large extent. The document review and portfolio analysis, however, finds that only 46% of project plans and schedule for achieving targets are realistic and evidence based. The analysis shows that some project partners would benefit from capacity building to ensure more efficient reporting on results attainment. Projects should strive to create results frameworks and indicators which allow them to report effectively on results to Norway, and unrealistic targets do not aid this objective. On the positive side, however, that partners seem to attempt make evidence-based targets is likely an indication that project interventions are deliberate, and not only addressing bottlenecks as they arise.

Projects are to a very large extent planning evaluations to assess the impact of program activities, but there is limited evidence that an effective learning feedback mechanism exists for the ongoing development of the program. 89.7% of project partner survey respondents (N=29) said they are planning or have completed an evaluation to assess the impact of their activities. Projects partners interviewed report that they were able gain Norway's approval to amend their projects and results frameworks when facing realities on the ground not in line with original project plans, reflecting a flexible approach to portfolio management on Norway's part.

Results Story: SYSTEMIQ Project STOP

Project STOP (Stop Ocean Plastics) in Banyuwangi, Indonesia is implemented by SYSTEMIQ. It was launched in July 2018 in partnership with the Banyuwangi Government in East Java, with the aim to strengthen the waste management system/approach and improve livelihoods and local environmental conditions. The project is linked to Waste Norway's CLOCC project, as it seeks to implement Banyuwangi's Solid Waste Master Plan, which is being co-developed with CLOCC.

The project is found to be aligned with the Banyuwangi government targets and ambitions on waste management. The project has successfully developed appropriate implementation designs in waste collection. Project STOP has supported two Banyuwangi villages with machines, infrastructure and equipment at their waste management facilities (TPS3Rs) and the community was provided with bins for organic and non-organic waste.

The Banyuwangi government focuses on tourism development and regards waste management as a necessary area of priority to support this strategic focus. This creates a need to integrate tourism development and waste management to strengthen local development. Banyuwangi operates with the motto that *"all agencies in Banyuwangi are tourism agencies, all places are tourism destinations, and all activities are tourist attractions"*. Tourism is thus relevant to Banyuwangi's environmental protection and development, and sustainable waste management is seen as part of it.

Project STOP has supported a waste management system that delivers economic benefit by raising village funds. This output may be synergized with the Village Fund Allocation (*Alokasi Dana Desa*) from central government and financial subsidies from the regency government.

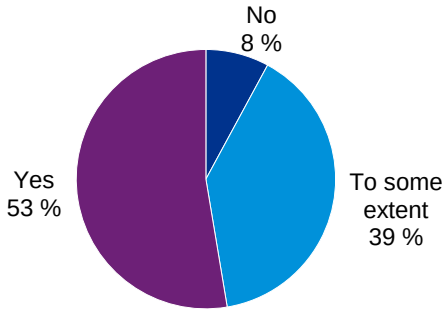
Communication and coordination between related and similar projects in Banyuwangi must be given priority. Potential synergies seem to be lost today, as different initiatives supported by Norway do not fully align and coordinate with each other and intended project stakeholders. This alignment needs to be improved to ensure project management procedures are not overlapping and creating externalities that undermine project achievements.

4.2.2 Results achievement

The following analysis presents the extent to which the Norwegian marine litter program has achieved desired results as set out in line with program objectives. The analysis is founded on evidence derived from a triangulated set of sources, including document review of project documentation analyzed using a Portfolio Analysis Tool, surveys, interviews, and field visits. On the basis of this analysis, KPMG considers with a satisfactory degree of confidence that the program has likely made moderate-to-large contributions towards its main objective to prevent and significantly reduce marine pollution.

The review team's qualitative analysis of the project documentation through deployment of an in-house Portfolio Analysis Tool reveals that results as reported by project partners are largely in line with their set targets. 38 of the 44 projects assessed reported data sufficient to feed into this assessment, representing 81% of the portfolio and thus also a representative sample to illustrate results achievement across the portfolio as a whole. 53% of project partners are assessed by KPMG to have achieved their set targets at the time of this review, while 39% have done so to some extent (Figure 15). Only 8% of the project partners are assessed to not have achieved their set targets at all. This should be taken as a very positive finding and is indicative of a high level of target achievement for the marine litter program so far.

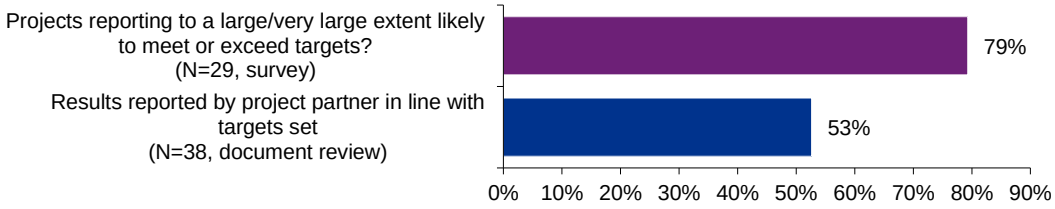
Figure 15 Are results reported by project partners at time of review in line with set targets? (N=38)



The review findings identify a gap between results estimation by project partners surveyed and results achievement evident through document review (Figure 16). 79% of project partners surveyed report large/ very large likelihood of meeting or exceeding overall targets. Project partners and counterparts interviewed also noted a generally high attainment of results. The document review on the other hand finds that a more modest – albeit still large – portion of projects, at 53%, report results in line with targets set.

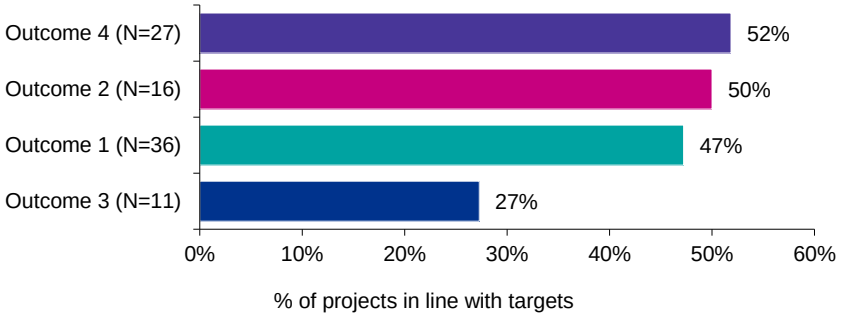
There might be several reasons for this discrepancy between self-reported project results attainment vis-à-vis document review findings. Firstly, accurate results reporting is likely challenging due to many project results frameworks lacking baselines and/or tangible targets. The document review is based on results as stated in project reports, while project partners might have more updated information. Secondly, projects might be more likely to self-report a higher degree of results-attainment when surveyed than is evident from their reports. Thirdly, projects who have higher target attainment may be more likely to complete the survey compared to projects with lower achievement, as such potentially skewing the survey sample. Regardless, both 79% and 53% of projects achieving results in line with targets should be considered positive.

Figure 16 Portfolio target setting vis-a-vis results achievement



Target achievement towards the four Outcomes of the marine litter program is relatively equal, with the exception of Outcome 3 which has seen lower levels of attainment. The review team has through document review and by deploying the Portfolio Analysis Tool identified the number of projects working to address each of the four program Outcomes (most address two or more), as well as the share of these projects reporting results achievement in line with set targets (Figure 17). The review team finds that projects addressing Outcome 4 report the highest level of results attainment, i.e. 52% of projects working to address Outcome 4 report results in line with targets. For Outcome 2 and 1, 50% and 47% of projects respectively report results in line with targets. Results achievement towards Outcome 3 is lowest, at 27%.

Figure 17 % of projects addressing program Outcomes reporting results achievement in line with set targets



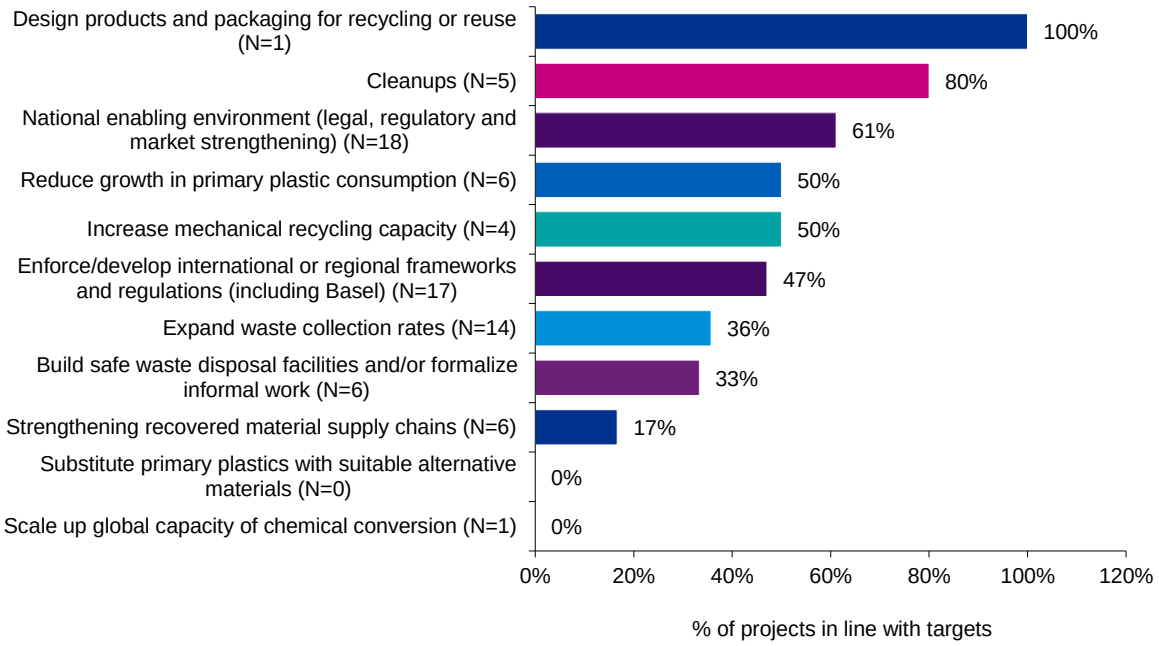
In terms of thematic results across waste value chain interventions, target achievement is found to be varied. The review team has through document review and by deploying the Portfolio Analysis Tool identified the number of projects implementing each of the 11 identified waste value chain interventions (most implement two or more), as well as the share of these projects reporting results achievement in line with set targets (Figure 18).

It is important to note that due to the significant difference in number of projects implementing the various waste value chain interventions, comparison of results achievement across the interventions with regards to determining most effective interventions is not possible. As such, 100% target attainment in a sample of one project implementing *Design products and packaging for recycling or reuse* does not mean that this intervention is necessarily more effective than e.g. *Strengthening recovered material supply chains* with 17% target attainment in a sample of 6 projects. The below thus serves only to give an indication of target achievement across projects implementing the interventions, reiterating that most projects implement two or more in unison, not as a guide from which to necessarily prioritize some interventions over others in the marine litter program.

The analysis finds that the highest levels of project target achievement across waste value chain interventions can be found in projects implementing key interventions identified as well-represented in the portfolio in chapter 4.1, to the extent it is possible to indicate noting the above caveats. This should be considered positive and an indication that the interventions as they are currently represented in the program are effective to a moderate-to-large degree. Among the three waste value chain interventions identified as most represented in the marine litter portfolio, project results achievement is relatively high:

1. Enforce/develop international or regional frameworks and regulations (including Basel): 47%
2. National enabling environment (legal, regulatory and market strengthening): 61%
3. Expand waste collection rates: 36%

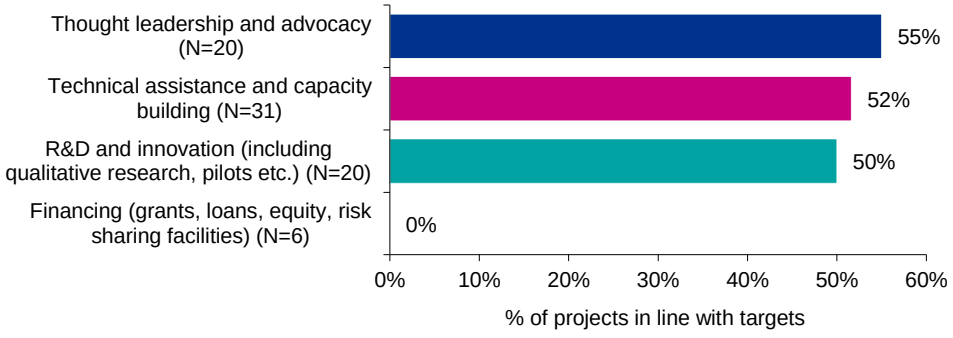
Figure 18 % of projects combating marine litter with the waste value chain intervention with the activity reporting results achievement in line with targets



With regards to the effectiveness of activities via which to intervene in the waste value chain, target achievement across the four activity types defined for this review is found to be relatively equal, with the exception of activity type 4 related to financing. The review team has through document review and by deploying the Portfolio Analysis Tool identified the number of projects intervening in the waste value chain via each of the four activity types (most implement two or more), as well as the share of these projects reporting results achievement in line with set targets (Figure 19). The analysis finds that achievement against set targets is higher and relatively equal in projects deploying activity types *Thought leadership and advocacy* at 55%, *Technical assistance and capacity building* at 52% and *R&D and innovation* at 50%. Among projects deploying activity *Financing*, no projects report results achievement in line with set targets.

This is indicative that, considering the current portfolio of projects, projects are more successful with regards to target achievement when deploying activity types *Thought leadership and advocacy*, *Technical assistance and capacity building* and *R&D and innovation* rather than activity type *Financing*. However, it is important to note that a far higher share of projects is found by the review team to be implementing the three former activity types (each implemented in 20-31 projects) than is found for the latter activity type, implemented in only six projects. I.e., the added value of *Financing* as an activity type should not necessarily be discounted on account of this analysis, as the likelihood of higher reported target attainment is greater for the three former activity types also due to a larger representation in the data set. It might also be that projects intervening in the waste value chain by way of financing also embody other common characteristics affecting results achievement which this analysis is not able to capture.

Figure 19 % of projects intervening in the waste value chain with the activity reporting results achievement in line with targets



The review finds that the program contributes to raising the awareness of decision-makers with regards to the importance of combating marine litter and plastic pollution. This is done through projects working to strengthen both national and regional enabling environments, as well as in contribution to global agreements and regulations such as through UNEA 5.2 (see box below). The Centre for Science and Environment (CSE) provides a good example of results achieved on awareness-raising among local and national political decision-makers in India culminating in improved waste management. CSE is also a best-practice example of a project partner which has achieved significant results with regards to expanding the evidence base for policy making on plastic pollution in India. Waste Norway's Clean Oceans through Clean Communities (CLOCC) project in Indonesia is another example showcasing good results on awareness-raising for decision-makers, in which Waste Norway and InSWA work in unison alongside Banyuwangi's local government to develop the regency Solid Waste Master Plan.

Results Story: CSE Development of two model cities on Waste Management

The project has been successful in the development of Indian cities Agra and Gurugram as model cities on waste management. The project has developed learnings to create a roadmap of cities to effectively implement waste management techniques and exposing stakeholders to the larger picture. City officials from Agra and Gurugram were supported with trainings on solid waste management to build their capacity in waste handling and monitoring in the respective local regions. The intervention resulted in improving the ranking of the model cities in Swachh Survekshan (from Agra-85, and Gurugram-83 to Agra-24 and Gurugram-24 at the end of the 2nd year of the project). Swachh Survekshan is an annual survey of cleanliness, hygiene and sanitation in villages, cities and towns across India.

Interaction with CSE project partners show that they were provided autonomy to ideate and implement the activities in a result-oriented manner. Results are being tracked in an efficient manner. The results framework and indicators are relevant and useful for capturing the results achieved through the project. Challenges are mitigated in consultation with stakeholders from the Embassy.

CSE has effectively identified opportunities and leveraged its competitive advantage. Research and analysis are a central feature of CSE and the effectiveness and legitimacy of CSE as an advocacy organization depends on it being evidence based**.** This has given CSE much of its credibility and identity, and this work has been essential for attracting the interest of both donors and partners. CSE's regional work has been strengthened in recent years. This has contributed to ensuring more effective use of regional data for research outputs, but also to strengthening relevance of research outputs for government, partners collaborators and donors in the regions.

CSE is well placed to facilitate dialogue and exchange of experiences between different actors. CSE at national and regional levels often contributes with different perspectives, innovative ideas and valuable examples of how similar issues have been addressed in other parts of the world.

Contributions of the Norwegian marine litter program to the process and negotiations towards the new global agreement to combat marine litter and plastic pollution

The program has to some extent contributed to the process and negotiations towards the new global agreement to combat marine litter and plastic pollution and has importantly likely influenced its contents to a large extent. Although it is difficult to make a conclusive assessment of this considering the abstract and at times confidential nature of such contributions, as well as the overwhelmingly qualitative and subjective nature of related evidence, the review team finds that projects did make significant contributions to the process towards a new global agreement. This assessment rests on subjective experiences from project partners and project counterparts.

One project partner interviewed stated that "it is rather difficult to specify the degree of contribution of the work of a particular project in a global initiative, but we believe (…) that we were part of the actors who contributed to the global call for attention." Contributions to the agreement in the program are in the form of advocacy, producing policy briefs, advocating on behalf of the informal waste sector, facilitating meetings and regional workshops, and documenting and gathering country-specific data on marine litter and plastic pollution.

Another project partner interviewed "led the push from civil society on waste picker rights and secured language in the mandate recognizing the 'significant contribution of workers in informal and cooperative settings to the collecting, sorting, and recycling of plastics in many countries.'" This project partner points out that this wording is an unprecedented recognition in a UN resolution of the role of waste pickers and "means that protection of their human rights and action to improve their livelihoods will be firmly on the agenda when formal talks start in November 2022." One project partner also argued that the funding under the Norwegian marine litter program led them to be in a unique position to help secure the final votes for the negotiating mandate at UNEA-5.2.

However, the contributions of Norway in this regard were downplayed by an interviewed government counterpart, who stated that Norway's contributions to the global agreement process had been minimal. However, it is the impression of the review team that this statement was intended as commentary on the politics of the negotiations as a whole, rather than on Norway's actual contributions per se. This might be an indication of key developing country partners' assessment of the process thus far with regards to inclusion and collaboration in the negotiations.

Further, the survey of project partners found that 41% of partners report to make very large contributions to program Outcome 4 (Global commitments and national and regional instruments are strengthened). Moreover, 62% of the 27 surveyed project counterparts reported that projects they support contribute to a large or a very large extent to the global agreement. It should be noted that several of the counterpart respondents were connected to the WWF project, largely aimed at program Outcome 4.

Several projects under the marine litter portfolio are likely to have provided key inputs to the global agreement by working closely with national governments or regional bodies. Several projects in the portfolio also specifically seek to contribute towards the process and negotiations, including:

- ✓ WWF: No Plastic in Nature (see section **Error! Reference source not found.** on global programs)
- ✓ New York University: Capacity and Community building work program on combatting marine plastic pollution
- ✓ IUCN: Plastic Waste Free Islands
- ✓ OECS: Building Resilience in the Eastern Caribbean through Reduction of Marine Litter and Pollution
- ✓ EIA-CIEL: Building Support for a Binding Multilateral Agreement on Plastic Pollution in the African and Pacific Island Regions
- ✓ NIVA and CSEAS – ASEAN: Norwegian Capacity Building Project for Reducing Plastic Pollution
- ✓ UNEP New Delhi: Coordinating and Providing a Common Platform for India-Norway Marine Pollution Initiative
- ✓ GRID-Arendal: Programme support
- ✓ UNEP: Programme cooperation

The review finds evidence of the program contributing to increasing public awareness of the crisis of marine litter and plastic pollution to a large degree. This is based predominantly on the India and Indonesia case studies, as well as the document review deploying the Portfolio Analysis Tool. Interviews and site visits with project partners in India and Indonesia found that for several of the projects, increasing public awareness and fostering behavioral change was a key focus area in which positive results could be

showcased. A strong example of a partner who demonstrates good results in this regard is the Afroz Shah Foundation in India, see box below. Beneficiaries and volunteers of the project noted that their awareness of the issue of plastic pollution had much improved since the Afroz Shah Foundation began engaging with them, and that they had since made concrete steps to reduce their use of single-use plastics and improve waste segregation at home for enhanced waste management in the local Mumbai slums. The project in effect has mobilized an entire local community to keep their environment clean. Similar examples of effective public awareness-raising could be found in Indonesia, for example through the Waste Norway CLOCC and SYSTEMIQ STOP projects.

Results Story: Afroz Shah Foundation offering bulk and refill options for Mumbai residents to reduce marine litter generation

To reduce plastic waste generation, the Afroz Shah Foundation mapped common consumer products in target households to provide packaging-free or refill alternatives. Spices, oils, detergents, soaps, shampoos and teas are some of the common consumer products sold in single-use plastic packaging. Packaging plastics vary from HDPE containers to small sachets, made of multi-layer plastic packaging (MLP). Not only do these packaging types fetch different prices on the recycling market, households across Mumbai also have varying access to waste collection services, leading to large volumes of unmanaged plastic waste.

Discarded MLP sachets have a particularly high risk of going unmanaged. In addition to their low value on the secondary materials market, the small sachets are time-consuming to collect. In areas without predicable access to formal waste collection services, informal workers are an integral part of their waste management services. For the informal waste pickers, picking sachets presents a high opportunity cost, who instead elect to pick higher-value, larger plastic items like PET plastic bottles.

The Afroz Shah Foundation set out to prevent plastic waste generation of all kinds to reduce the risk of unmanaged plastic waste entering the environment. The foundation implemented a series of "bulk" projects, where they addressed common product groups, including food grains and cereals, vegetables, spices, oils, detergents, shampoo, tea, and soap. Volunteers interviewed households to prepare a list of those interested in bulk packaging, calculated their consumption, pre-ordered products bulk, and provided bulk or refill alternatives**.**

The target group in the pilot now has access to bulk/refill alternatives. This reduces plastic waste generation, is more affordable for the household, and leads to a cleaner environment. According to the foundation's calculations, 250 households purchasing spices in bulk for a year will eliminate the need 78,000 plastic pieces, and lead to total savings of 2,400,000 INR.

In addition, the Afroz Shah Foundation has a strong policy of empowering local youth to carry out projects, aiming to build local program leaders. Progress over the next few years will prove if bulk projects are scalable and sustainable, but documentation and interviews show the projects to have an important local footprint. Alongside the bulk projects, the Afroz Shah Foundation directs funding to mindset change, mangrove and ocean cleanups, spot cleaning and outreach to people without housing**.**

The program to a moderate extent mobilizes additional investments and other contributions from development partners and the private sector. Norwegian support is to an extent suitably leveraged to unlock additional funding or is, at the very least, one of several contributors to partner projects. This would indicate that its support is complimentary to other donor initiatives in this space and may be a key enabler in terms of accessing other sources of program support. While the project partner survey finds that 52% of

projects to a limited or moderate extent mobilize additional investments and other contributions from development partners and/or the private sector, multilateral partners interviewed noted that as Norway was an early funder to the marine litter sector, it acted as a trailblazer for other donors to follow suit. An example is the World Bank PROBLUE multi-donor trust fund. Further, a balance of support from different donors would help to spread both the risk of single-donor dependency, as well as the sustainability of interventions beyond Norwegian support. The extent to which Norwegian support is catalytic to unlocking other sources of assistance, however, is unclear and should be further investigated.

4.2.2.1 Effects of COVID-19 on program implementation

Considering that the program launched in 2018, the COVID-19 pandemic understandably affected implementation and achievement towards portfolio objectives to varying extent. Effects were moderate to large, however the effect varied greatly between projects. 51% of survey respondents note that their project implementation was strongly/very strongly affected by COVID-19, while 34.5% note a moderate effect. Many state that the severe effects of lockdowns and travel bans on their ability to commence activities, due to e.g. lack of access to relevant stakeholders and beneficiaries, closed government offices, suspensions of key events, and inadequate disease and infection control measures. For those dependent on specific supplies to facilitate their projects, supply chain delays also severely affected implementation. Partners also emphasize the personal toll the pandemic took on staff and project counterparts, noting its negative effects on mental health and wellbeing and thus also on project activity.

As a response to COVID-19, numerous partners saw the need to re-focus their activities within relevant scope to e.g. assess the impact of COVID-19 on the vulnerability and livelihoods of informal waste workers, on improving the management of medical (hazardous) waste, and to ensure the safety of project staff, volunteers and beneficiaries. Importantly, interviewed project partners also note the significant impact COVID-19 had on prevalence of single-use plastic waste. One project which collaborated with local industry for disposal of COVID-19 waste in Wuhan, China e.g. reports that single-use plastic waste handled was six times greater than normal. This re-orientation of activities is also reflected in project documentation as shared by Norad.

On the other hand, some project partners interviewed and surveyed state that COVID-19 also had some surprising benefits to project implementation. This pertains mostly to the large portion of projects doing awareness-raising, capacity-building and advocacy, of which many experienced a wider reach due to the unexpected sudden uptake of digital tools such as Teams and Zoom allowing for much higher attendance than originally planned for in-person activities. Some project partners also noted that due to the increased burden of care placed on women during the pandemic, their attendance for in-person trainings dropped significantly compared to pre-COVID-19. With the introduction of digital trainings, however, women's attendance spiked and at times far surpassed that of men. Some project partners commented that the pandemic in this sense helped them discover new tools to ensure a wider reach. Other partners who had access to project sites on the ground noted that the pandemic allowed them additional time to prepare thorough baselines, as project implementation phases were delayed.

4.2.3 Effectiveness: Global programs spotlight

The below provides an overview of activities, themes, geographical footprint and high-level results of selected key global programs under the Norwegian marine litter portfolio. Included here is a selection of representative global programs supported by Norway, including a deep dive into results from the INTERPOL Marine Pollution Enforcement Project. Note that for this report, the review team did not have access to complete country-specific funding and activity data for global projects, thus not allowing for in-depth assessment of granular results achieved. Moreover, due to the nature of multi-donor trust funds and other instruments in which donor funds are untagged and untracked, an analysis of these results says little about the effectiveness of Norwegian development funding specifically and more about what these project partners have achieved as a result of the common support of participating donors.

4.2.3.1 World Bank – PROBLUE

In September 2018, the World Bank Group (WBG) announced the establishment of the Global Program for the Blue Economy, PROBLUE. PROBLUE is an Umbrella 2.0 program multi-donor trust fund that supports healthy and productive oceans, with an aim to achieve the sustainable and integrated development of marine and coastal resources in healthy oceans. Norway has pledged NOK 140.2 million and NOK 110 million in FY22 and FY21 respectively. PROBLUE provides grants to WBG activities. The grant allocation process is organized around four pillars:

- **Pillar 1: Improved fisheries governance and sustainable aquaculture**: designed to drive progress in WBG's current and growing work on improved fisheries governance by supporting efforts to reduce overexploitation of capture fisheries through improving transparency, governance, and reducing the impact of harmful fisheries subsidies; and improving aquaculture by increasing biosecurity to prevent disease and supporting new development models in aquaculture.

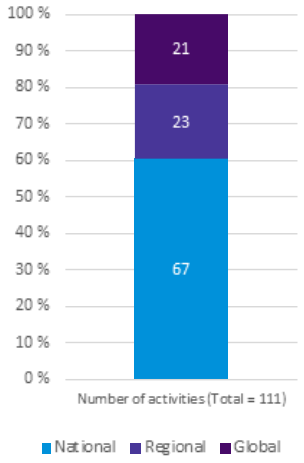
- **Pillar 2: Marine litter & pollution management**: addresses prevention of marine pollution and litter through improving solid waste management to stop leakages, supporting transitions to a more circular economy, in which products are designed for reuse and recycling, making waste more valuable; and reducing the upstream production and use of plastics.

- **Pillar 3: 'Blueing' oceanic sectors**: designed to assist coastal developing countries (CDCs) and Small Island Developing States (SIDS) in making established and traditional oceanic activities more sustainable while promoting the sustainability of emerging sectors.

- **Pillar 4: Integrated seascape management**: addresses the need for an integrated approach to sustainable marine and coastal management, leveraging a growing body of analytical work and decision-making tools, like marine spatial planning (MSP) and natural capital accounting (NCA), to advance the capacity of countries to assess the trade-offs among different development pathways.

In terms of the open portfolio, 111 activities are being implemented (Figure 20). Of these, 67 are implemented on a national level, 23 projects are being implemented at both the national and regional level, while a further 21 are global initiatives. As of June 30, 2021, PROBLUE has added value to WBG investments globally totaling more than USD 12.3 billion to date.[19] These investments in critical coastal and marine ecosystems are vital for a blue economy to flourish and to help rebuild coastal communities.

Figure 20: PROBLUE geographical portfolio summary



Countries		
Albania	Jamaica	Saint Vincent
Argentina	Kenya	Sao Tome e Principe
Bangladesh	Laos	Senegal
Cabo Verde	Lebanon	Seychelles
Cambodia	Liberia	Sierra Leone
China	Madagascar	Somalia
Colombia	Malaysia	South Africa
Comoros	Maldives	Sri Lanka
Costa Rica	Mauritius	Tanzania
Ecuador	Mexico	Thailand
Egypt	Moldova	The Gambia
El Salvador	Morocco	Timor-Leste
Georgia	Mozambique	Tunisia
Ghana	Nepal	Turkey
Grenada	Nigeria	Ukraine
Guinea	Pakistan	Vietnam
Haiti	Panama	West Bank and Gaza
Honduras	Peru	
India	Philippines	
Indonesia	Saint Lucia	

4.2.3.2 WWF Norway – No Plastic in Nature

WWF's program addresses the negative impacts of plastic waste, especially in the marine environment, as and impacts of such waste on local communities particularly in developing countries in Southeast Asia and China while developing similar activities in Africa. It was designed as a follow up to the ambition of zero plastic discharge into the oceans, agreed at the United Nations Environment Assembly (UNEA) in 2017. Norway has pledged NOK 161.3 million and NOK 96.4 million in FY22 and FY21 respectively.

WWF-Norway is responsible for implementation with more than 15 WWF offices in Asia and Africa, working with government and non-government partners at international, national and local levels (Figure 21). The Program consists of a Global Component and a Component in China, both of which implement the three main pillars of Global Policy, Extended Producer Responsibility and Plastic Smart Cities (PSC).

[19] World Bank (2022). PROBLUE 2022 Annual Report

According to a recent mid-term review of the program conducted in 2020,[20] the majority of the activity-oriented targets at this stage of program implementation had been achieved, notably:

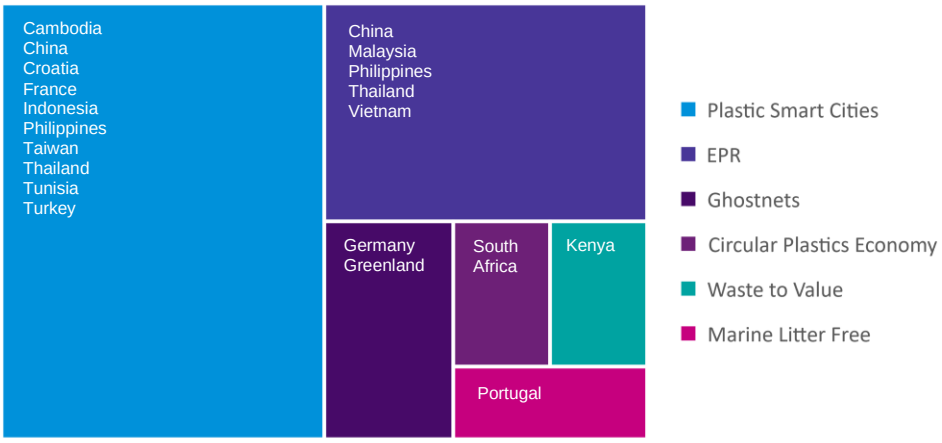
- **Outcome 1: Commitments by governments for a new international treaty to regulate marine plastic pollution.** 65 states (target: 30) took steps to adopt a new international treaty to regulate marine plastic pollution, though the project was unsuccessful in influencing the Chinese government to take a clear position on the treaty.[21]

- **Outcome 2: EPR committed to by both governments and consumer goods companies**. 8 (target: 7) governments committed to taking steps to introduce EPR in their legal frameworks, while 32 global companies (target: 8) with a market share larger than 10% made similar pledges to address end-of-life issues of their products and packaging; a further 6 (target: 5) regional companies and 12 (target: 18) Chinese companies made similar commitments.[22]

- **Outcome 3: Cities, tourism destinations and their stakeholders have developed and adopted scalable action-programs, to transform hotspots for plastic pollution into Plastic Smart Cities**. 27 cities and tourism destinations (target: 20) committed to becoming Plastic Pollution Free Cities; 2 Chinese cities (target: 4) made similar commitments while the Chinese government issued a policy to endorse a Plastic Pollution Free Cities/Provinces index/scorecard.[23]

- **Outcome 4: Enhanced understanding of the issue of plastic pollution in Africa and China, and options to address it identified**. 54 African states (target: 6) expressed support for a legally binding instrument while a Chinese White Paper on plastic pollution was developed.[24]

Figure 21: WWF geographical footprint[25]



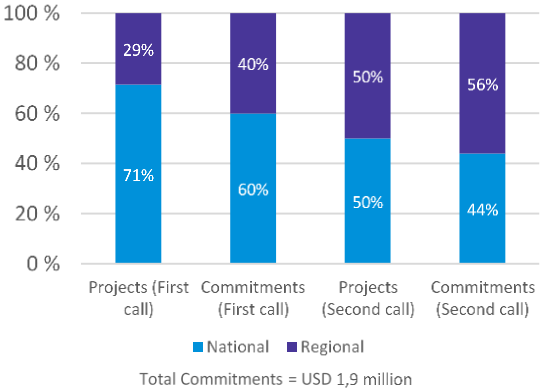
4.2.3.3 BRS Conventions – Further actions to address plastic waste

There are two phases of Norwegian support to BRS. BRS1 focused on capacity building within the waste management systems of Ghana, Bangladesh and Sri Lanka. BRS2 is centered on governments' decision in 2019 to amend the Basel Convention to include plastic waste in a legally binding framework to make global trade in plastic waste more transparent and better regulated. A new Partnership on Plastic Waste was also established to mobilize business, government, and other stakeholders with expertise to assist in implementing the new measures. The project benefits ODA-DAC countries through the Small Grant Program of the BRS Regional Centers, legal and scientific technical assistance of BRS Secretariat, pilot projects under the Partnership on Plastic Waste, and public awareness and education campaigns. Norway has pledged NOK 70.7 million in support to the project. Notable achievements, out of 7 Components, were:

[20] Mepex Consult AS (2020)
[21] WWF-Norway (2020). WWF-Norway's Results Report 2018-202
[22] Ibid
[23] Ibid
[24] Ibid
[25] WWF Global Plastic Navigator. See: Explore - Global Plastic Navigator (wwf.de)

- **Component 1: Small Grants Program (SGP) to build the capacities of Parties in addressing plastic waste through the implementation of the Basel Convention.** The SGP on Plastic Waste, operationalized in 2020, held 2 rounds of call for proposals, in which 15 were selected for implementation with a supporting envelope of USD 1,9 million (Figure 22).

Figure 22: SGP geographical footprint[26]

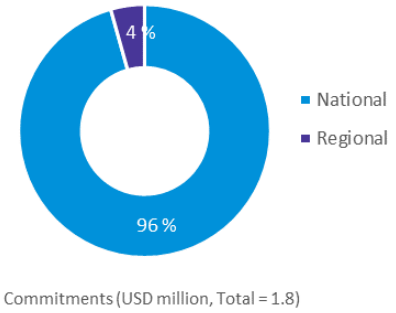


Regional	National	
Honduras, Guatemala, Panama	Nigeria	Jordan
Cambodia, Myanmar, Sri Lanka	South Africa	Niger
Lesotho, Malawe, Namibia, Tanzania, Zimbabwe	India	Argentina
Cambodia, Indonesia, Laos, Malaysia, Philippines	Albania	Pakistan
Albania, Belarus, Bosnia and Herzegovia, Georgia, Moldova, North Macedonia	Suriname	
Morocco, Algeria, Tunisia		

- **Component 2: Promoted use of updated draft technical guidelines on the environmentally sound management of plastic waste and practical guidance on the development of inventories for plastic waste.** The Conference of Parties to the Conventions updated the technical guidelines for the identification and environmentally sound management of plastic waste and disposal. The Governments of China, Japan and UK lead the updating of the guideline.

- **Component 3: Partnership on Plastic Waste and meetings under the Basel Convention:** The Secretariat received a total of 188 submissions, 23 of which were selected for implementation, with a total commitment of USD 1.8 million (Figure 23).

Figure 23: Partnership on Plastic Waste geographical footprint[27]



Countries	
Afghanistan	Maldives
Angola	Myanmar
Brazil	Nepal
Cambodia	Nigeria
Cambodia and China	Palestinian Territories
Cameroon	Philippines
China	Sierra Leone
Eritrea	Tanzania
Kenya	Thailand
Kiribati	Uganda
Laos PDR	Vietnam
Malaysia	Maldives

[26] BRS Norad-2. Second interim progress report of the project. Reporting period: Q3/Q4 of 2020 and Q1/Q2 of 2021

[27] Plastic Waste Partnership. See: http://www.basel.int/Portals/4/download.aspx?d=UNEP-CHW-PWP-Pilot-Project-List-Overview.English.pdf

Results Story: INTERPOL fostering regional and global coordination in marine pollution enforcement.

INTERPOL Marine Pollution Enforcement Project leverages INTERPOL's role as the only police organization that works at the global level. Tapping into the INTERPOL network, the project coordinates international law enforcement operations against maritime pollution offenders, including with ODA-DAC countries, and facilitates inter-agency collaboration at national level though a focus on live operations and delivering results on the ground. This allows Norad support to be maximized, leveraging the unique position, network and resources of INTERPOL and member country resources for combatting marine pollution and microplastics.

The project contributes to outcome 4 of the Development programme to combat marine litter and microplastics, strengthening global commitments and national and regional instruments. Operation 30 Days at Sea, a focal point of the project, is an important instrument. A recent mid-term review of the project found that stakeholders saw Norad funding as instrumental in developing the 30 Days at Sea concept into a global operation with 67 participating countries in 2021, of which many were ODA countries. The results of Operation 30 Days at Sea (see **Error! Reference source not found.**) demonstrates an upward trajectory in the number of countries participating – including ODA-country participation – in inspections and offenses, enhancing a coordinated responses to marine pollution threats around the world.

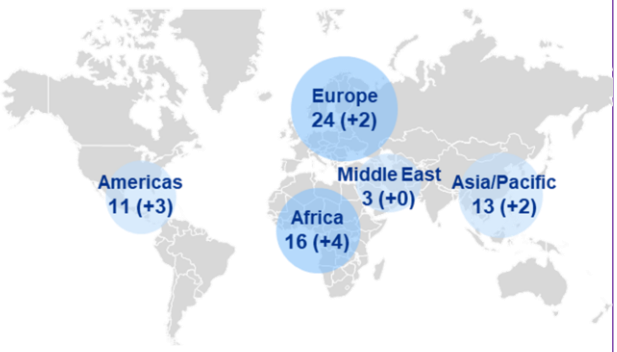
National agencies, too, play a role. Around 300 national agencies spanning law enforcement, environmental protection, maritime, national security and economic agencies took part in the operations in 2021, compared to 276 agencies in 2018. Efforts to improve national coordination and build capacities is particularly important, as laws and regulations to combat marine litter and microplastics are put in place.

Figure 24 Operation at Sea results

Key results by year

	2018	2019	2021	
Countries participating	58	62	67	↗
ODA-eligible countries	33	42	37	↗
National agencies	276	249	300	→
Inspetions conducted	15 446	17 715	38 138	↑
Offenses detected	1 507	3 789	5 607	↑

Participation by year (2021 vs 2018)



Source: KPMG (2021) INTERPOL Marine Pollution Enforcement Project Phase II: Mid-term Review

4.2.4 Learning in the Norwegian marine litter portfolio

Evaluations related specifically to the Norwegian program to combat marine litter and microplastics have been conducted, with various degrees of recommendation uptake. ITAD and the Chr. Michelsen Institute (CMI) conducted the Evaluation of the Norwegian Aid Administration's Approach to Portfolio Management[28] which included a proposed Theory of Change (ToC) for the marine litter program. This proposed ToC is only partially in line with the program logic and results framework as shared with KPMG for this review, suggesting that the recommendations of the ITAD evaluation have not been formally absorbed into the program governing documents. Norad staff interviewed also informed the review team that external consultants have previously conducted an evaluation providing recommendations on how Norway might improve collaboration with the private sector in the marine litter program[29]. KPMG was also informed that the recommendations from this evaluation were not taken up into the program. Other Norad staff

[28] ITAD Ltd. and the CMI on behalf of Norad (2020) Evaluation of the Norwegian Aid Administration's Approach to Portfolio Management, https://www.norad.no/en/toolspublications/publications/2020/evaluation-of-the-norwegian-aid-administrations-approach-to-portfolio-management/.

[29] Resource Futures (2019) How to Engage with the Private Sector to Prevent and Significantly Reduce Marine Litter, Norad.

interviewed stated that the low absorption of learning products into the program is due to very low capacity in the Oceans section – as across Norad as a whole, as well as internal bureaucratic processes hindering agile incorporation of learning in the program governing structure.

The program is found to a moderate extent to be sharing lessons learned and facilitating collaboration among projects and key partners. Project partners interviewed note that Norway organized two project partner workshops prior to the pandemic, one of which was intended to create the program RBM system. One partner found this to be an "extremely important undertaking which certainly enhanced cooperation." Norad also organized a webinar among partners during the COVID-19 pandemic to directly address plastic pollution and management of hazardous/medical waste. There have been no program-wide formal mechanisms to meet and share experiences since then, though cooperation between complementary projects is encouraged. Partners are evenly divided on whether the program facilitates lessons learned to a limited/some extent (48%) or to a large extent (45%). This discrepancy in partner experiences of collaboration and lesson sharing facilitated by the program could be due to variation in access to platforms (see box below on cross-program collaboration and lesson sharing in India).

Cross-program collaboration and lesson sharing in India

For example, interviews and country case studies show that cross-project lesson sharing and collaboration facilitated by Norway varies greatly between countries. In India, Norway funds a coordinating mechanism facilitated by UNEP under the India-Norway Marine Pollution Initiative. This is chaired by the Ministry of Environment, Forest and Climate Change and attended by the Norwegian embassy and Norwegian project partners. As a result of this mechanism, project partners in India noted a higher level of engagement and mutual awareness between project partners than they did e.g. in Indonesia where there is no such coordination mechanism and partners' mutual awareness and sense of collaboration was much less pronounced. Moreover, when asked to provide examples of cross-program lesson-sharing activities, most positive project partners refer to the pre-pandemic partner workshops hosted by Norway. Considering the COVID-19 pandemic and the inability of most projects to meet in person,

There are in fact few platforms within the program with the explicit aim of efficient learning across projects. An example of such a platform, however, is the UNEP coordinating mechanism in India which attempts to coordinate the Norway-funded projects there. The platform has both benefits and challenges. On the one hand, the projects funded under the Norwegian program to combat marine litter are very much aware of one another and each other's initiatives. On the other hand, project partners interviewed noted that they perceive the platform to be more of a reporting mechanism to Norwegian and Indian authorities rather than a genuine mechanism for coordination and lesson-sharing across projects. Some project partners interviewed also noted that they do not necessarily want there to be too much coordination with other program partners, as they do not see how their project would benefit due to the very different activities under each project. They also do not express a wish to work together due to worries about too great efficiency losses if subjected to "collaboration bureaucracy". In terms of way forward, some project partners expressed in interviews that they would welcome a higher degree of South-South lesson-sharing between projects in different countries of similar characteristics, rather than in-country lesson-sharing.

Partners would like to share their lessons learned with other projects with thematic overlap. A surveyed partner believed projects with geographical proximity and potential for technical synergy should be required to collaborate or coordinate. An interviewed partner in India pointed out that they did not feel the need to cooperate with nearby projects with little thematic overlap but saw value in enabling South-South cooperation to share lessons-learned between partners with similar focus.

Facilitating lessons learned between project beneficiaries is also seen as a key to success. One surveyed partner shared their view that institutional coordination in the solid waste management sector was very limited in their region, providing a significant challenge in implementing policy and regulatory frameworks. Several projects in the portfolio fit the description of facilitating regional lessons learned between similar agencies, such as:

- ✓ ASEAN-Norwegian Capacity Building Project for Reducing Plastic Pollution (ASEANO)
- ✓ Plastic Waste Free islands

- ✓ Building Support for a Binding Multilateral Agreement on Plastic Pollution in the African and Pacific Island Regions, and
- ✓ Capacity and Community building work program on combatting marine plastic pollution

Overall, the review team finds that progress reports refer to disseminating lessons learned/best practices through their activities or knowledge products. These are not, with a few exceptions, shared in progress reports to Norway. As many of the projects refer to success factors for projects related to the program priorities, Norway should ask projects to report on lessons learned more directly. These include lessons learned from engaging the informal sector, expanding waste collection, creating guidelines for public-private partnerships, and implementing regulatory frameworks and policy. WWF's mid-term review has a similar recommendation, where documenting lessons learned from their work so far is essential for the sustainability of the project.

Based on the country case studies and project documentation, lessons clearly identified are:

- ✓ **Dedicating time and funds for robust baseline studies impacts the effectiveness of the intervention as well as the ability to document results.** The Afroz Shah Foundation spent time mapping common household items before launching their bulk initiatives. Similarly, WWF's mid-term review points out that "Robust baseline studies can provide important new information on poorly documented plastic pollution problems and provide a credible basis for future monitoring of the impacts of implemented measures."[1]

- ✓ **Industry engagement** is by the Indian NGO CSE seen as a success factor for ensuring compliance, awareness, and effects of EPR.

- ✓ **Policy briefs that clearly identify how global and regional agreements has the potential to affect each government** were identified as essential tools for gaining support for an ambitious global agreement on plastic pollution.

4.2.5 Potential future program indicators

As the review has found, the lack of set quantitative program indicators hinders identification of progress made towards the marine litter program's main objective to prevent and reduce marine litter. Due to the lack of standardized indicators and quantitative reporting it is e.g. not possible to assess quantitatively how the different project types compare in terms of e.g. cost efficiency, mobilization and impact on beneficiaries. This begs the question of which indicators might in fact be suitable for this purpose.

4.2.5.1 Background

Interviewees involved in the establishment of the program note that due to significant political engagement and related time pressure at program inception, insufficient time was allocated to establishing a strong RBM system. Several interviewees note that although efforts were made to create such a system, with the complexity and broad scope of the portfolio, as well as time available, there were insufficient resources to establish a robust RBM system prior to program launch.

Norway and partners have struggled to identify relevant crosscutting indicators suitable for tracking results across all projects since program inception. At the launch of the program, Norway invited its project partners to a workshop to discuss how best to measure results across the portfolio. SDG 14.1 was selected as the impact goal of choice for the program. However, there was broad consensus among partners that not all projects were equally well-placed to track results against this SDG, due to the disparities between project themes and activities. At the program onset there were also discussions among Norway and partners as to whether projects could be tagged by, and report on, the four program outcomes.

However, due to the broad scope of many projects often covering several of the defined outcomes, it was decided that no such reporting was feasible. As such, it was finally agreed that each project would only report to Norway against results indicators selected to fit the individual project and in the end no indicators were developed for the purpose of aggregation of program-level results.

4.2.5.2 Potential future program indicators

The marine litter program should in this regard prioritize selected common, quantitative indicators to track goal attainment across projects. KPMG recommends to first introduce a set of simple crosscutting indicators based on the existing portfolio. Projects can select the crosscutting indicators

applicable to their projects and report against these already in the current program period. Reporting on attainment against such tangible and "practical" indicators, which also will not require them to alter their existing results frameworks, should be feasible. Indicators would have to be defined based on what Norway sees as priority to measure.

Potential indicators inspired by other programs, project partners and developed by KPMG:

a) Number of households with increased access to waste management services (Outcome 1)

b) Collected, recycled, or prevented waste in kilograms (Outcome 1, Outcome 2)

c) Number of knowledge products produced by project partners (Outcome 1)

d) Number of innovations supported by the project partner (Outcome 1, Outcome 3)

e) Area cleared of legacy waste in km^2 (Outcome 2)

f) Number of global/ regional consumer goods companies, with a market share larger than 10%, taking responsibility for end-of-life impact of their own products and packaging (Outcome 3)

g) Number of regional/national action plans supported by the project partners (Outcome 4)

h) Number of countries committed to three strategic goals defined by the High Ambition Coalition to End Plastic Pollution in the plastic treaty negotiations (Outcome 4)

i) Number of public policies that advance Extended Producer Responsibility, access to waste management, etc. supported by the project partner (Outcome 3)

Moreover, the program should include the Sustainable Development Goals that reflect its actual logic, activities, and desired outcomes to better align with and contribute to the upcoming global agreement on plastics. Indicators for the program's main global goal of SDG 14.1 are largely designed to monitor plastic marine litter density, leakage to the ocean, and composition, are obtained by modeling, earth observation or sampling, and are not applicable to most projects in the portfolio. Relevant SDGs with related sub-indicators in this regard are:

i. SDG 8: Decent work and economic growth

ii. SDG 11: Sustainable Cities and Communities (11.6)

iii. SDG 12: Responsible Consumption and Production

iv. SDG 15: Life on Land.

KPMG recognizes that Norway provides funding to several multilateral global programs under the marine litter portfolio (representing 28% of the total portfolio at 13 projects in total), and that Norway does not require standardized reporting from these partners. However, as this leaves 34 projects which are not global multilateral, there is still scope for introducing standardized indicators for remaining and/or new projects. Moreover, several of the global multilateral programs are found by the review team to include some of the best examples of SMART indicators in the portfolio, as discussed above.

Appendix 1: Literature review findings summary

The marine litter field has experienced a wave of research, different approaches, and activity over the last decade. It is important to ascertain whether the program is in line with current trends and lessons learned. KPMG will conduct a desk study of relevant literature to establish a foundation of knowledge and map prior research on the topic of marine litter and waste management interventions, in particular in relation to sustainable development and South Asian region. The output from the literature review will inform survey questions and possible indicators.

Particular attention will be paid to:

- ✓ **Recent marine litter and plastic pollution reports from international institutions, their research bodies, and NGOs**, in particular those focused on interventions and monitoring. Sources include the World Bank, UNEP/ the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) and selected foundations and research institutions.

- ✓ **Themes presented in selected scientific journals**, including the Marine Pollution Bulletin, Marine Policy, Science of the total environment.

- ✓ **Similar marine litter government programs in terms of program goals and geographic focus**, including programs run by United Kingdom, Germany, USA, Japan, South-Korea, Sweden and Canada, in order to select 2-3 programs that we will look into in more detail.

Recent marine litter and plastic pollution reports are covering tools for intervention and their effectiveness. The Pew Charitable Trusts and Systemiq report "Breaking the Plastic Wave" created six scenarios between 2016-2040 to assess the effects of principal known solutions to plastic pollution from land to sea. The goal was to answer strategic questions for decision-makers, including

- ✓ Are we on track to solve the plastic pollution crisis?

- ✓ Do we have the technology to solve the problem?

- ✓ What is the way out?

Under the "current commitments" scenario, plastic leakage is expected to increase 147% in 2040 compared to 2016 levels, achieving only a 7% reduction compared to Business-as-Usual. The report concludes that no single-solution strategy, e.g. implementing only upstream or downstream solutions, is capable of achieving near zero-leakage. This is reflected in recent models, where predicted growth in plastic waste exceeds efforts to mitigate plastic pollution[30]. The authors behind the Systemiq-report argue that eight existing synergistic system macroplastic interventions are capable of breaking the cycle (Figure 25)[31].

[30] Borrelle et al., Predicted growth in plastic waste exceeds efforts to mitigate plastic pollution, Science, Vol. 369, Issue 6510, 2020.

[31] Pew Charitable Trusts and SYSTEMIQ (2020) "Breaking the Plastic Wave."

Figure 25 System interventions relevance by geographic archetype and plastic category

	System intervention	Most relevant income groups				Urban/ rural		Most relevant plastic categories				Main responsible stakeholder
1	Reduce growth in plastic consumption	HI	UMI	LMI	LI	U	R	Rigid	Flex	Multi	Microplastics	Consumer goods brands; retailers
2	Substitute plastics with suitable alternative materials	HI	UMI	LMI	LI	U	R	Rigid	Flex	Multi	Microplastics	Consumer goods brands; retailers
3	Design products and packaging for recycling	HI	UMI	LMI	LI	U	R	Rigid	Flex	Multi	Microplastics	Consumer goods brands
4	Expand waste collection rates in the Global South	HI	UMI	LMI	LI	U	R	Rigid	Flex	Multi	Microplastics	Local governments
5	Increase mechanical recycling capacity globally	HI	UMI	LMI	LI	U	R	Rigid	Flex	Multi	Microplastics	Waste management companies
6	Scale up global capacity of chemical conversion	HI	UMI	LMI	LI	U	R	Rigid	Flex	Multi	Microplastics	Waste management companies; petrochemical industry
7	Build safe waste disposal facilities	HI	UMI	LMI	LI	U	R	Rigid	Flex	Multi	Microplastics	National governments
8	Reduce plastic waste exports	HI	UMI	LMI	LI	U	R	Rigid	Flex	Multi	Microplastics	National governments

HI: High-income UMI: Upper middle-income LMI: Lower middle-income LI: Low-income

Identifying how the marine litter program affects the barriers and enabling factors behind successful implementation of the interventions, could help determine program efficiency, i.e. "adoption of standards or regulatory requirements for plastic packaging".

There are no standardized universal indicators for this work, though GESAMP and the Inter-Agency Expert Group on SDGs have developed and proposed their guidelines. These are largely designed to monitor plastic marine litter density, leakage to the ocean, and composition, and obtained by modeling, earth observation or sampling.

On their own, these are insufficient to measure the effects of the range of interventions needed to combat global plastic pollution. These include not only documenting the distribution and composition of marine litter over time and space, identification of sources, movement and fate, but also quantifying impact, public engagement and awareness and reporting for current and future global frameworks.

Measuring synergistic approaches can provide methodological challenges for identifying success factors behind single interventions. For instance, increased private sector engagement measured in terms of funding, can be the result of awareness raising, policy creation and opportunities for innovation.

Marine litter is part of all three planetary crises, and some recent marine litter research is exploring the interconnectedness between global plastics pollution and climate change (Figure 26)[32]. The effects of plastic pollution and climate change co-occur in the environment, and solutions often have both beneficial and detrimental cross-cutting effects. In addition, the impacts of poor waste management fall disproportionally on the poor, who may both be living and working near landfills, have no access to waste management infrastructure, or partake in the informal waste management sector[33]. Interventions designed without holistically considering these interlinkages might succeed while exacerbating the other issue.

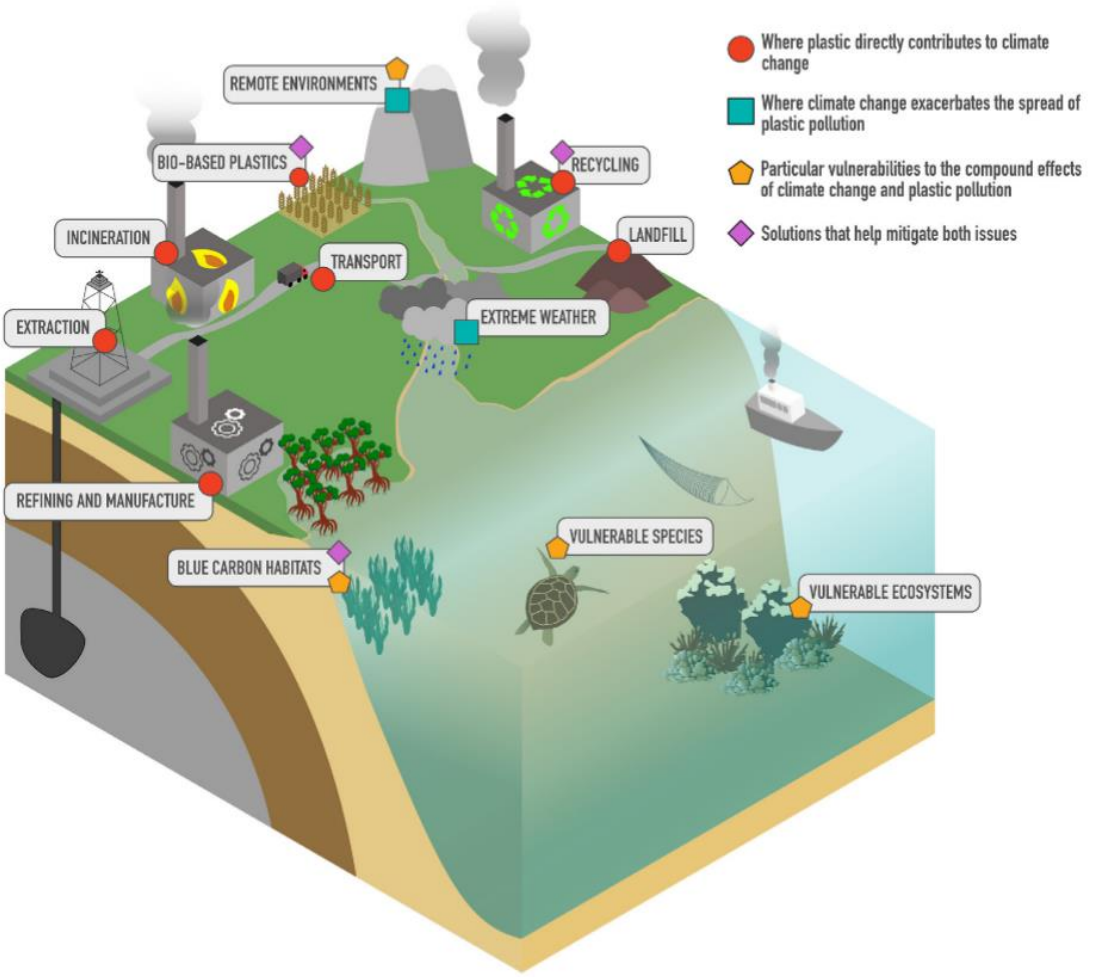
For instance, plastic packaging is argued to reduce transportation emissions due to its light weight but increases waste amounts. On the other hand, solutions designed to tackle climate change may also help mitigate plastic pollution. Researchers Martin et al. have shown that mangroves, a habitat known for its

[32] Ford et al. (2022) The fundamental links between climate change and marine plastic pollution, Science of The Total Environment, Volume 806, Part 1.

[33] Kaza et al. (2018) "What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050." International Bank for Reconstruction and Development / The World Bank, Washington, DC.

carbon sequestration abilities, also act as a major plastic sink.[34] Blue carbon projects, therefore, can be efficient interventions for several environmental objectives, and cleanup efforts in these habitats must be conducted with care. Surveying participants in the Norwegian program to combat marine litter and microplastics on whether they pursue any interconnected efforts can help gain more insight into this topic.

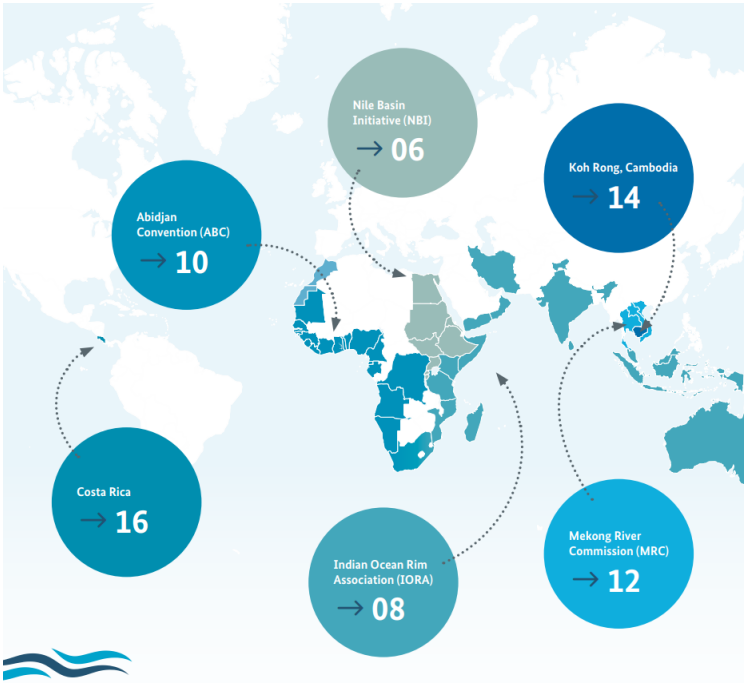
Figure 26 Interactions between plastic and climate



Other countries have programs with similar objectives to the Norwegian marine litter program. Germany, USA, the United Kingdom, Canada, Sweden, Japan, and New Zealand are just some countries with ambitious international marine litter efforts. To consider how the Norwegian program is coherent and complimentary with non-Norwegian actors, this review will compare strategies and geographic focus of similar German, Canadian and US programs.

One of the German grant programs is called the Marine Debris Network – Regional hubs around the globe - abbreviated Marine:DeFRAG. The program launched in 2020 and will remain active until 2023. Its geographic focus is on countries eligible for official development assistance (ODA), in particular riparian countries of polluted rivers and on coastal regions and island states. It emphasizes countries and regions "that are responsible for causing significant inputs of marine litter," though it refrains from mentioning specific countries. Like the Norwegian program, this wording shows that it aims to address the most significant sources of plastic inputs to the ocean. In contrast, however, the program acknowledges that there might be significant riverine marine litter contributions form landlocked countries. The program dictates that regional projects should be transnational multi-country projects with an impact on one or more geographically connected river or marine region(s). This priority is evident in the report "Tackling Marine Litter: Global Partnerships and Activites" that provides the following figure:

[34] Maritn et al. (2020) Exponential increase of plastic burial in mangrove sediments as a major plastic sink, Science Advances, Vol.6, No. 44.



Marine:DeFRAG gives preference to cooperation projects that reduce plastic waste in the medium term using proven solutions, **or that establish waste and circular economy management systems**. Intervention types include policy consultation, capacity building, technological cooperation, investments and implementation of relevant institutional frameworks. Marine:DeFRAG is wary of in-situ extraction efforts due to its potential harm to biota, and doubtful long-term impact. Like the Norwegian program, cleanup efforts are considered when part of awareness raising. In contrast with the Norwegian program, only organizations registered in Germany are eligible to apply for grants.

Canada, like Norway, has a range of activities aimed to prevent, reduce and remove marine litter. Its initiatives are collected under the Canada's Zero Plastic Waste Agenda, which includes both domestic regulatory measures, as well as international cooperative initiatives. Canada contributes 100 million CAD to help "developing countries prevent plastic waste from entering the oceans, address plastic waste on shorelines, and better manage existing plastic resources." These funds are channeled through:

- The World Bank ProBlue Fund
- The World Economic Forum's Global Plastic Action Partnership
- The Incubation Network to prevent plastic waste from entering the oceans, and
- The G7 Innovation Challenge to Address Marine Plastic Litter.

This strategy ensures wide global and regional support but does not lead to direct financial support of projects that are eligible in the Norwegian portfolio. Like Canada, Norway might consider outwardly differentiating support for existing global programs like ProBlue, from the rest of its portfolio.

The US has several international marine litter, waste management, and plastic pollution programs and initiatives managed by both USAID and the Department of State. Some USAID programs include Clean Cities, Blue Ocean (2019-2024), and the recently completed Municipal Waste Recycling Program. Department of State programs include among others the CAFTA-DR and Panama Environmental Cooperation and support for the Global Ghost Gear Initiative (GGGI).

The program that most closely resembles the Norwegian program is USAID's $48 million program Clean Cities, Blue Ocean. There has also been dialogue between NORAD and USAID to cooperate on some program initiatives.

The program is working through five building blocks:

1. Policies to enable a circular economy
2. Improved solid waste services and infrastructure
3. Locally-viable innovations and technologies
4. Sustained behavior change, and
5. An inclusive and equitable system

Its geographical focus is smaller in scope than the Norwegian program, and like the name implies, it works closely with partners on the city-level. It aims to find partners in rapidly urbanizing countries in Asia, the Pacific Islands, Latin America and the Caribbean, and has projects in Indonesia, the Maldives, the Philippines, Sri Lanka, Vietnam, the Dominican Republic, and Peru.

This brief comparison with other program strategies shows there is overlap in terms of intervention types and geographic focus, but with slight differences in priorities. This sentiment was reflected by interviewed project partners. One interviewee found the programs to fund different projects in terms waste value chain interventions, where some programs prioritized support for national action plans, and others technical support in terms of funding waste management infrastructure. Another interviewed partner requested more focus on the consuming countries upstream, rather than targeting countries where greatest waste leakages are expected to occur.

The United Kingdom Commonwealth Litter Programme (CLiP) started its operations in 2018. The program is led by the Centre for Environment Fisheries and Aquaculture Science (Cefas) and aimed at finding country-specific solutions to the environmental and socio-economic problems caused by litter in the marine environment. Its regional focus is empowering partners across the Commonwealth in the South Pacific, Caribbean and Africa.

Though this inter-commonwealth work is not a direct correspondent to the Norwegian, Canadian and United States' international efforts, it is useful to consider its program pillars:

- ✓ Land based sources of litter
- ✓ Sea based sources of litter
- ✓ Removal of litter from the marine environment
- ✓ Science and Education
- ✓ Outreach.

CLiP has published reports from five countries: Sri Lanka, Belize, Solomon Islands, Vanuatu and South Africa. Though the project also aims to build capacity and improve waste management systems, fewer projects are in operation simultaneously. There is little overlap with the Norwegian marine litter program given CLiP's size and geographical focus.

Other initiatives include:

- ✓ The Ocean Country Partnership Programme (OCPP) and Global Plastic Action Partnership (United Kingdom)
- ✓ The Germany-ASEAN partnership Reduce, Reuse, Recycle to Protect the Marine Environment and Coral Reefs (3RProMar) (Germany)
- ✓ USAID Clean Cities, Blue Ocean program (USA)
- ✓ USAID Municipal Waste Recycling Program (USA)
- ✓ The MARINE initiative (Japan)
- ✓ The Zero Plastic Waste Initiative (Canada)

Comparing geographical focus and program goals from similar initiatives will aid in seeing if the Norwegian program is coherent and complimentary with programs managed by other non-Norwegian actors**.**

The literature review illustrates the maturation on the global plastic pollution issue, in particular on documenting and modeling the need holistic interventions across the plastic lifecycle. Several sources agree that single-solution strategies and current commitments are insufficient in meeting the global plastic pollution crisis.

Appendix 2: Country case studies

This section sets out the two in-depth case studies on India and Indonesia conducted as part of the review.

a) India

Summary

This case study is aimed at contributing to the assessment of the Norwegian development program on marine litter and microplastics, which has significant emphasis on India. It is based on the field visit conducted 16 to 23 September 2022 in Mumbai, Surat and New Delhi. Four projects from the country project portfolio have been selected and reviewed: Marine litter and mindset change in Mumbai (Afroz Shah Foundation), Mainstreaming Circular Economy (Centre for Science and Environment) INOPOL (NIVA) and Coordinating and Providing a Common Platform for India- Norway Marine Pollution Initiative (UNEP). These projects are being implemented through various partners such as multilateral organization, NGOs, civil society, bilateral government partners, private sector etc.

Primary data collection in India included stakeholder interactions with project counterparts, Norwegian Embassy and Ministry of Environment, Forest and Climate Change (MoEFCC). The case study has focused on mainly three country level projects. Interactions with stakeholders other than the project counterparts have also been incorporated to study the program from a holistic point of view.

Key findings

1. Project objectives reflect the goals of the Norwegian Marine litter program
2. Strong coherence with national and state level policies and schemes
3. Project is an extended arm to the concept of Blue Economy which is one of the key themes of G20
4. Supporting the contemporary landscape scenario of marine litter in India
5. Project counterparts have strong presence in the country
6. Results of most of the project outcomes have shown considerable impact on ground

Introduction: country context, key metrics

Marine pollution, as a distinct subject, has neither been dealt with in policy nor economics in India. National Centre for Coastal Research (NCCR) which comes under the Ministry of Earth Sciences is the nodal agency for marine litter and micro plastics. Currently there is shortage of available data on marine litter sources, channels, transport mechanisms, and measurement of the amount of trash entering the marine ecosystem in India. The issue of marine litter is being governed by stakeholders from various miniseries and departments of government of India such as the Ministry of Environment, Forest and Climate Change (MoEF&CC), Ministry of Earth Sciences (MoES)- office National Centre for Coastal Research, Ministry of Jal Shakti etc.

India generates about 3.5 million tons of plastic waste annually. A lot of this plastic enters waste streams in huge quantities. Of this waste, high value plastic like PET is often collected by informal waste workers (*ragpickers*) and sold, whereas low value plastic like multi-layer packaging in the form of sachets etc. are never properly treated.

To curb plastic pollution, India notified Plastic waste Management Rules in 2016 under Solid waste management rules. Along with the policy interventions, Government of India runs “Swachh Bharat Mission” or the “Clean India Mission”. The objectives of this campaign is at-source segregation of solid waste. The co-operative federalism empowers the Indian states to work as implementation bodies for the rules enacted by the central government. Additionally, states create their own regulations basis the local context. For instance, Maharashtra banned the use of single use plastic before the central guidelines, which came in force in July 2022.

To further make plastic producers responsible for their waste, India notified the Regulations on the Extended Producer Responsibility (EPR) in 2021, under Plastic Waste Management Rules, 2016. The rules cast Extended Producer Responsibility (EPR) on Producer, Importer, Brand Owner for collection and

recycling of plastic packaging waste. EPR is applicable to both pre-consumer and post-consumer plastic packaging waste.

The Indian government has demonstrated a commitment to minimize and manage marine litter and facilitate marine waste management. The government is contemplating a comprehensive National Marine Litter Policy, for which it has already initiated research. The steps taken in perusal of this policy, in particular, and management of marine litter in general, have been as follows:

- The National Centre of Coastal Research (an attached office of the Ministry of Earth Sciences) has been furnishing data on marine litter through monitoring of temporal and spatial distribution of marine litter along Indian coasts and adjacent seas.
- Studies on marine litter and micro plastics distribution and characterization have been carried out to guide the formulation of a National Marine Litter Policy.
- The National Centre for Coastal Research has been undertaking national level beach clean-up activities and awareness programs involving school, college and University students, research institutes and NGO's.
- In 2018, the National Centre for Ocean Information Services ((an autonomous body under the Ministry of Earth Sciences) set up an Automated Ocean Pollution Observation System to monitor ocean pollution levels and state of the marine system. This data will supplement efforts towards marine policy.
- Ban on usage of identified single-use plastics and its implementation to mitigate marine litter.
- India has participated in international dialogues on marine litter including Participation Coalition for Nature and People, under the "One Planet Summit" in Paris in 2021, UN Ocean Conference, Global Plastics Treaty negotiations of United Nations Environment Assembly. India is also a signatory to the UN "Coastal Clean Seas" campaign. India has also signed an agreement with Germany on "Cities Combating Plastic Entering the Marine Environment."
- India launched the Swacch Sagar, Surakshit Sagar campaign in July 2022, for improving ocean health through collective action which includes goals of responsible consumption, waste segregation and responsible disposal of waste. The campaign included a coastal cleanup drive across 75 beaches in the country with 75 volunteers for every kilometre. The target was to remove 1500 tons of marine litter from sea coasts. It was a first-of-its-kind and longest running coastal cleanup campaign in the world.
- Headquarters Naval Component organised a 'Swachh Samudra Abhiyaan' on 10 July 2019 near Indian Navy Jetty at Port Blair. The initiative aimed to reduce marine pollution through salvage of non-biodegradable waste from the harbour seabed and support coastal ecological system.

Enabling Environment for Marine Litter Management

Despite the aforementioned initiatives being taken by the government, India still lacks a streamlined marine litter policy. However, an enabling environment and policy landscape exists for marine litter mitigation, through interventions in areas that are of consequence to marine litter. The government has commissioned several studies on causes of marine litter, from which it has emerged that plastics are among the prime contributors to marine litter. This is also supplemented by international studies, including one by UNEP, which found that plastics account for at least 85% of total marine waste. India dumps 6 lakh tons of plastic waste into oceans annually. Thus, the government's notification of Plastic Waste Management Rules also has ramifications for marine litter. According to UNEP, improving marine litter management will require improved systems for solid waste management. India's Solid Waste Management Rules are also valuable in this regard.

The associated policies also contribute in developing a circular economy approach to marine litter. For example, provisions such as payment of a 'spot fine' for littering, mandating producers to minimize generation of plastic waste, source segregation of waste and establishment of waste-to-energy plants as directed under the Plastic and Solid Waste Management Rules, facilitate an approach of "reduce-reuse-recycle" that contribute towards a circular economy. The waste management infrastructure is being strengthened under Swacchha Bharat. The Swaccha Bharat guidelines include a comprehensive framework for implementation of Plastic Waste Management Rules, including primary and secondary segregation, collection and storage of waste and transport to Plastic Waste Management Unit. These provisions enable

effective plastic waste management and, therefore, reduce chances of dumping of the waste into water bodies.

Indore Municipal Corporation has implemented a Material Recovery Facility in its circular economy approach to waste management. The initiative includes sorting waste into 13 categories, integration of ragpickers and waste collectors to support quality check and segregation and processing of waste for manufacturers.

An important component of the Plastic Waste Management Rules is "Guidelines to Extended Producer Responsibility." EPR refers to the practice of making producers accountable for the environmentally sound management of their product during end-stage consumption. According to the current Rules, producers of plastic packaging will have to manage 35% of 'Q1' waste in metric tons in 2021-22. (Q1 is calculated by adding last two years' average weights of plastic packaging material sold and pre consumer plastic packaging waste and subtracting the annual quantity of plastic packaging supplied to brand owners.) The EPR target will be increased to 70% in 2022-23 and 100% from 2023-24 onwards. The recycling obligation for producers will be 50% for rigid plastics in 2024-25, 60% in 2025-26, 70% in 2026-27 and 80% from 2027-28 onwards.

The Plastic and Solid Waste Management Rules have been scaled up with each amendment. The government has been implementing a policy of 'phasing out', instead of immediate discontinuation to give producers and vendors sufficient time to adjust to approaches of environmentally sustainable waste generation and advanced waste management.

Another important dimension in waste management to prevent marine litter is the issue of informal waste works in India. Informal waste-pickers contribute to the majority of waste collection. Thus, their formalization and consequent training is an urgent need. With respect to this, the National Environment Policy, 2006, acknowledges the informal waste sector and emphasizes the need for giving legal recognition to and strengthening informal sector systems of collection and recycling. The National Action Plan on Climate Change, 2009, makes a similar assertion while recognizing the informal sector as the "backbone of India's highly effective recycling system." The Solid Waste Management Rules, 2016 emphasises the need for establishment of a system for integration of waste collectors to facilitate their participation in solid waste management.

Summary of Policy Landscape

The legal and policy landscape for marine litter in India is represented below:

Table 1: Marine Litter Related Regulations in India

Laws and Regulations	Year	Policy Related to	Associated Clauses
Water (Prevention of Pollution and Control) Act	1974	Water Pollution	• Control of water pollution-prohibits discharge of pollutants in water bodies beyond a standard) • Establishing regulatory bodies for water pollution
Environmental Protection Act	1986	Water Pollution	• Disallows emission or discharge of environmental pollutants, including in water, in excess of standards
Coastal Regulatory Zone Notification	1991; amended 2016	Discharge of waste in oceans and coastal zones	• Prohibition and regulation of of discharge of untreated waste and affluents from industries, cities, towns and other human settlements or dumping of city and town waste in different Coastal Zones • Clearance for discharge of treated wastewater for some Zones • NOC for projects involving discharge of wastes for some Zones
National River Conservation Plan	1995	Control of River Pollution	• Control river pollution • Covers 33 rivers, excluding Ganga • Interception and diversion of sewage systems • Setting up of sewage treatment plants

			• Construction of Low Cost Sanitation Toilets to prevent open defecation on river banks
Ban on usage of identified single use plastics	2021	Control marine litter	• Notified under Plastic Waste Management (Amendment) Rules 2021 • Ban of single use plastics which have low utility and high littering potential
Plastic Waste Management Rules, 2016	2016 Amended 2018, 2021, 2022.	Waste Management	• Mandates plastic waste generators to minimize production of plastic waste • Mandates responsibilities of local bodies, gram panchayats, waste generators, retailers and street vendors to manage plastic waste. <u>2018 Amendment:</u> • Phasing out of multi-layered plastic • Prescription of a central Registration System for registration of producer/importer/brand owner. <u>2021 Amendment:</u> • Ban of single use plastic • Permitted thickness of plastic bags to be increased to 75 microns by 2021 and 120 microns by December 2022. • Environmentally sustainable management of plastic packaging waste <u>2022 Amendment:</u> • Classification of plastics under 4 categories • Mandatory reuse of rigid plastic packaging • Extended Producer Responsibility defined • Introduction of sale and purchase of EPR Certificates • Environmental compensation based on 'Polluter Pays' Principle
Solid Waste Management Rules	2016; Amended 2019, 2020.	Waste Management	• Responsibility of generators to segregate waste • Manufacturers of disposable products to provide financial assistance to local authorities for establishment of a waste management system • Processing and treatment of bio-degradable waste <u>2019 Amendment:</u> • Mandatory setting up of material recovery facilities or secondary storage facilities for sorting of waste <u>2020 Amendment:</u> • Rule made applicable to every village where population is more than 3000 • Mandating local and Panchayat authorities to renew authorization for collection and transportation of waste
Namami Gange Plan	2014	Abatement of pollution and	• River surface cleaning

		conservation of River Ganga	• Grossly Polluting Industries located along Ganga have been directed to reduce the effluent quality & volume or implement zero-liquid discharge • Water Quality Monitoring
Swaccha Bharat Abhiyan	2014	Waste management	• ODF+ phase- sludge management and zero dumping of waste
Smart Cities Mission	2015	Waste Management in SMART Cities	• Waste water recycling • Solid waste management • At source reduction and reuse • Waste to energy conversion • Waste disposal

Country program overview:

1. Afroz Shah Foundation: Marine litter and mindset change in Mumbai

Afroz Shah Foundation (ASF) runs numerous projects on macro plastics and plastic litter in Mumbai city of India. The projects have interventions basis the waste management hierarchy, at every stage of waste generation; *pre-litter stage, litter stage and post-litter stage*. This approach for waste management takes into consideration the entire waste value chain from generation to disposal.

Coherence

The projects have introduced interventions in line with the objectives of the Norwegian marine litter program. ASF aims to curb plastic generation through a behavioral shift in the local population. The foundation identified 44 household items that come in small non-recyclable packaging and supplies these items at a cheaper cost and in bulk to local people. This ensures lesser generation of waste in the ecosystem.

The foundation has introduced interventions based on Norwegian vision of waste reduction at generation while keeping a strong alignment with various national policies like:

1) Plastic Waste Management Rules, 2016

2) Extended Produced Responsibility, 2022

The objectives are defined keeping in mind the overall ecosystem of plastic waste in the country while determining key targets and opportunities to introduce effective intervention. The project aims to build grassroot leaders to ensure project sustainability and mindset change in the locals. The program employs local youth to build capacity amongst people. This results in multiplier effect in achieving a collective outcome.

Effectiveness

During the stakeholder interactions, it has been observed that conceptualization and implementation of the projects is evidence-based. The societal impacts of the interventions are regularly assessed to derive implications and further iterate projects to make them more impactful.

1) Minimize Plastic Generation: By introducing measures that focus on community-wide behavior change. This is done via door-to door campaigning and supplying common household items in plastic-free packaging This ensures project sustainability over longer period of time as this results in identification of local leaders, with greater influence in their communities. A number of projects have been implemented by the foundation that has resulted in greater impact on ground.

1 **Femme Freedom Project**: A campaign to educate local population about menstrual waste along with free distribution of menstrual cups.

2 **Vegetable Power**: Through this project, ASF sells fruits and vegetables without plastic packaging, while educating masses about the evils of plastic packaging. At present, this project touches base

with 5,000 people. The project has expansion plans, where an app will be rolled out once the project reaches 15,000 people.

3 **Plastic free shops**: Plastic free shops are envisioned to sell day to day commodities like masalas (dried spice mix) in plastic free packaging.

2) Reduction of marine litter: The entire socio-economic value chain of plastic collection is taken into account. The findings suggest that informal sector is majorly involved in plastic waste collection in India. ASF identified that lesser economic value of low value plastics results in increase in marine litter. Therefore, interventions to collect plastic that doesn't enter the recycling chain due to innumerous reasons are introduced. These measures have effectively resulted in bringing an initiative towards cleaner marine ecosystem in Mumbai.

2. Norwegian Institute for Water Research (NIVA) with Mu Gamma Consultants, TERI, Toxics Link, SRM, CIPET: India-Norway Cooperation Project on Capacity Building for Reducing Plastic and Chemical Pollution in India (INOPOL)

The project collaborates with the Norwegian development program to combat marine litter and microplastics by aiming to support India's ambitious targets to reduce plastic releases and to implement the Stockholm Convention on POPs by (1) providing science-based knowledge and (2) strengthening the local and regional capacity to prevent and mitigate the environmental threat posed by plastic and chemical pollution. The knowledge produced under the INOPOL project will form a pilot which later may be used to scale up efforts at national level. The project model consists of stakeholders from diverse expertise ranging from technical and scientific modeling to social impact evaluation.

Coherence

Since the overarching project lays down the agreement between MoEFCC and Norwegian Embassy, hence the results and action points through this project shall be key takeaways for government and will supplement the efforts. Standardization techniques are being developed in this project which will help policy makers for assessment of microplastics. There are test protocols done to validate the findings of the study. The study is not confined to marine but also cosmetics, agriculture to analyse the presence of microplastic and toxic residue in other domains. The INOPOL has linkage and convergence with various national level policies in India. Following are the few policies and mapped during the assessment:

- Plastic Waste Management (amendment rules 2022)
- National Water Policy
- National Framework for Safe Usage of Treated Water by Ministry of Jal Shakti, Department of Water Resources, River Development & Ganga Rejuvenation

There is strong congruence between objectives of programs under INOPOL and programs run by stakeholders from Mu Gamma Consultants, TERI, Toxics Link, SRM, CIPET etc. Studies and their analysis by INOPOL complement other programs based on similar themes.

Effectiveness

INOPOL focus on the maritime and industrial state of Gujarat, where rapid industrialization and urbanization have contributed to making Gujarat state one of the most polluted states in India. Through the INOPOL project, Surat Municipal Committee has taken initiatives to include the informal sector as part of waste management team. This can be developed as a replicable model for other municipal committees. The informal sector should be integrated and not isolated as part of Just Transition. Thus, the INOPOL project looks at the social dimension of waste management as well leading to dignified and safe working conditions.

CIPET also played a major role in advocacy for single use plastic ban in India. Program representatives from the six organizations have been working in synergy and have utilized the lockdown period of Covid in conducting scientific research. INOPOL has also played a significant role in identification and acceptance of issues and measures related to marine litter in amendments of existing policies and schemes in India. The data and scientific outlook through this project have helped in designing solutions to combat marine litter.

Capacity building of manpower and young students has helped in promoting research in this direction thereby fostering a culture of knowledge dissemination across the larger group. Exposure to such kind of

international projects has been very motivating and sensed huge participation from diverse stakeholders as well as sharing of thought process led to awareness creation in the wider domain. Structured efforts and cross learning has happened through skill development in the domain of microplastic analysis which is a contemporary skill enhancement.

On the lines of sustainability, INOPOL project has triggered many other projects. In the Stockholm Convention meeting, while discussing INOPOL findings and results, it was discussed how there is a need for such kind of projects in Middle East Asia. Hence the impact of this project has been witnessed on international forums.

3. Centre for Science and Environment (CSE): Mainstreaming Circular Economy

As part of the Norwegian program to combat marine litter and microplastics, CSE is implementing national level projects in various parts of the country. One of the projects by CSE is addressing land to sea pathways of waste by creating cost-effective, environmentally sound, and locally or regionally adapted solutions to land-based waste pollution. The key activities involved were:

1.

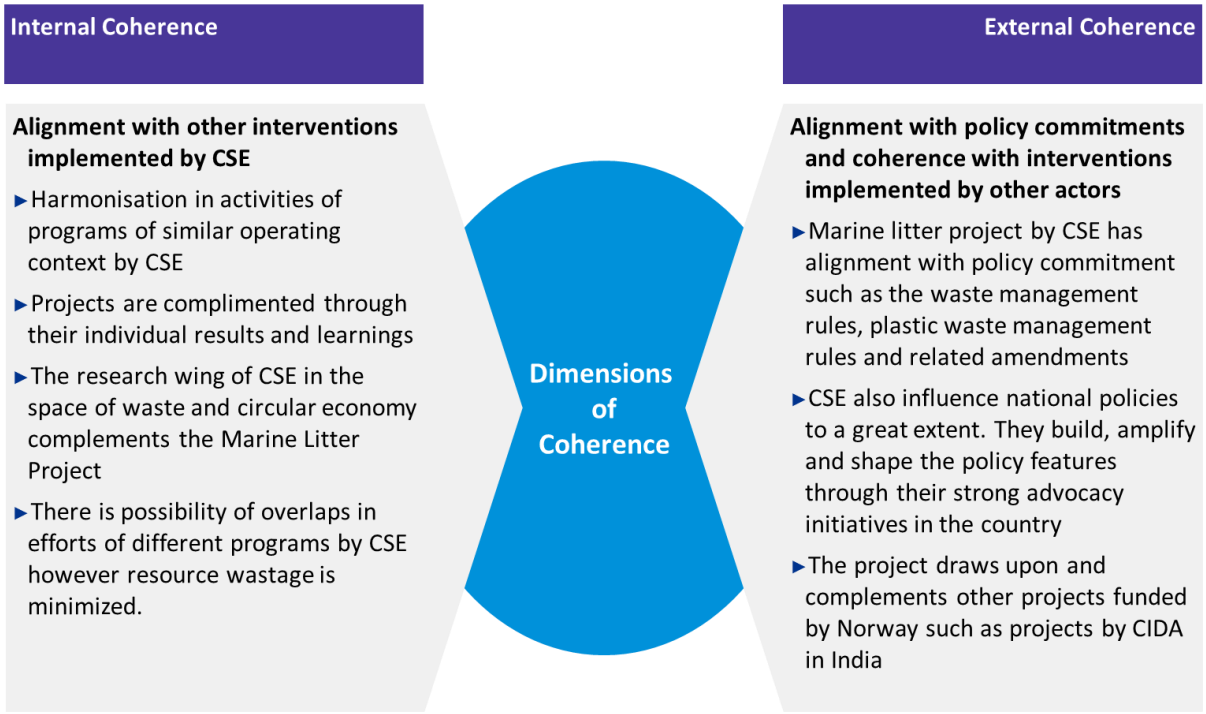
To enhance capacity of the urban local bodies to manage waste in accordance with the concepts of circular economy.

To develop Agra (Uttar Pradesh) and Gurugram (Haryana) as model cities on waste management.

Coherence

The project has alignment and consideration in designing and implementing a clear, policy-coherent intervention. Even though many organizations during the past decade have paid increasing attention to the land based waste solutions, CSE has according to most interviewees a unique role in that it focuses exclusively on issues and does so in a sustained and strategic manner along with a case-by-case approach. CSE's contextual and thematic knowledge and strategic advice are valuable in the country. CSE strives to facilitate interactions, discussions and joint actions between governments, multilateral institutions, civil society, private sector actors and individuals at national, regional and even global levels. At the same time, science-based evidence facilitated by CSE in their own labs plays a very important role to understand waste management issues at a local level, in Indian context.

According to sources, majority of the marine litter comes from land-based sources. CSE has been able to address both internal and external coherence through their project activities. During the stakeholder consultations, it has been observed that CSE addresses the synergies and interlinkages between the intervention and other interventions carried out by their various departments. There is cross learning happening between various departments. The results and implications of other projects related to the overarching issue of waste complements each other by providing relevant learnings, supported by both practical and scientific evidence.



Effectiveness

The mainstreaming circular economy in waste management sector project has been able to achieve its objectives within the target period and there is robustness of systems and processes in the implementation strategy. During the stakeholder interactions, it has been observed that targets are well structured in consultation with stakeholders from the Norway Embassy in India. However, indicators have been evolved during project phases hence determined in a flexible manner.

The evaluation considered the overall objectives of the project and then focused on effectiveness across two key outcomes:

1. Strengthening capacity of Urban local bodies to manage waste in accordance with the concepts of circular economy

Reports and interviews show CSE has initiated, facilitated, financed, and provided input to several activities and events which have contributed towards activities such as creating a forum of cities to strengthen to catalyze cross learning, innovation & sharing of best practices. To support the research on current priorities and focus areas on India, they have released a pan-India compendium in collaboration with India's national policy think tank NITI Aayog which captures the best practices in Solid Waste Management. The initiative called 'Zero Waste School Campus' and its targets were hampered due to the pandemic and non-operation of the schools. Research and developing technical studies have supplemented the other activities of the project. The inputs from these research materials have also been considered in the government policies and related amendments. Further goal is to achieve the targeted number set during the program duration. CSE supported 37 cities in 3 north-eastern states (Arunachal Pradesh, Mizoram and Nagaland) for building their capacities to frame a bye-law for ensuring source segregation, impose door-to-door collection tariffs, penal provision for those who are found to be offenders. The draft of the by-laws is derived from the Solid

Waste Management Rule 2016, Plastic Waste Management Rule 2016 and its subsequent amendments. Hence, the mainstreaming circular economy in waste management sector project has made genuine efforts and shown impact in not just working in alignment with the national policies but to also amplify and shape the policy features through their recommendations and research based evidence.

2. Development of two model cities on Waste Management

The project has been successful in development of Agra and Gurugram as model cities on waste management. Targets were enhanced in a gradual manner in accordance with the implementation of the project activities. Determining of targets in a step-by-step model helped the project to achieve its key objectives. The project has developed learnings to create a roadmap of cities to effectively implement waste management techniques and exposing stakeholders to the larger picture. City officials from Agra and Gurugram were supported with trainings on solid waste management to build their capacity in handling and monitoring in the respective local regions. The intervention resulted in improving ranking of the model cities in Swachh Survekshan (from Agra- 85, Gurugram-83 to Agra-24 Gurugram-24 at the end of 2nd year of the project). Swachh Survekshan is an annual survey of cleanliness, hygiene and sanitation in villages, cities and towns across India. It was launched as part of the Swachh Bharat Abhiyan.

Interaction with CSE project partners show that they were provided autonomy to ideate and implement the activities in a result-oriented manner. Results are being tracked in an efficient manner. The developed framework and indicators are relevant and useful for capturing the results achieved through the project. Challenges are mitigated in consultation with stakeholders from the Embassy.

CSE has identified opportunities. Primary data collection and assessment show that research and analysis is a central feature of CSE. This has given CSE much of its credibility and identity, and that this work has been essential for attracting the interest of both donors and partners. The effectiveness and legitimacy of CSE as an advocacy organization depends on its advocacy being evidence based. CSE's regional work has been strengthened in recent years. This has contributed to ensuring more effective use of regional data for research outputs, but also to strengthening relevance of research outputs for Government, Partners Collaborators and Donors in the regions.

CSE is well placed to facilitate dialogue and exchange of experiences between different actors. CSE at national and regional levels often contributes with different perspectives, innovative ideas and valuable examples of how similar issues have been addressed in other parts of the world. The results and learning of the project mainstreaming circular economy in waste management sector by NORAD will be complementing projects by CSE across Asia-Pacific.

b) Indonesia

4.2.6 Summary

This case study is aimed at contributing to the assessment of the Norwegian development program on marine litter and microplastics, which has a significant emphasis on Indonesia. It's based on the field visit conducted from 26 September to 1 October 2022 in Jakarta, Bogor and Banyuwangi. Three projects from the country project portfolio have been selected and reviewed: the UNDP Secretariat, CLOCC and STOP projects. The study and assessments have been conducted with based on the OECD DAC evaluation criteria coherence, effectiveness and impact and sustainability.

This case study on focuses on the review criteria of coherence and effectiveness, as well as impact and sustainability to some extent.

Norwegian support to the UNDP Secretariat project provides clear strategic synergies, and fuels existing and well-embedded national processes under an Indonesian government policy to reduce plastic waste to marine environments by 75% within 2025. The high level of coherence between the Norwegian program and Indonesian political priorities provides a nurturing environment for impact and sustainability.

More work should, however, be done on the Norwegian side in terms of ensuring coherence between different initiatives. This is highlighted by the lack of communication and coordination between the CLOCC and STOP projects in Banyuwangi. Potential synergies seem to be lost today, as different initiatives supported by Norway do not fully align and coordinate with each other and intended project stakeholders. This alignment needs to be improved to ensure project management procedures are not overlapping and creating externalities that undermine project achievements. A possible contributing factor to the coherence deficits overserved in Banyuwangi might be the fact that Norway has adopted a multi-actor approach in its marine litter program, where both Norad and the MFA/RNE are managing different portfolios of initiatives under the same program. CLOCC is managed as part of the Norad portfolio, while SYSTEMIQ is managed as a partner under the RNE portfolio.

The review of the Indonesia projects in terms of effectiveness mirrors also observations made in this review's attempt to assess aspects of impact and sustainability. Both the STOP and CLOCC projects provide indications that fundamental issues linked to pricing models and handling fees for waste management in Indonesia makes it challenging to achieve results and to reach targets appropriately. It is outside the scope of single projects to address such systemic issues, but it could perhaps be addressed at a program level, as a policy agenda or area of priority for research or advocacy within the Norwegian portfolio.

The adjustment in the establishment of more appropriate strategy to combat marine litter may be extended. The problem is very dynamic hence the approach is non-linear as well. Scenario on land-based is certainly the main strategy in marine debris handling in Indonesia. In order to combat this issue it may be important to adjust that approach by developing scientifically more relevant instruments and adapted models. Islands and coastal based areas may have different technological treatments, social and institutional diversifications compared to the mainland. Marine plastic debris from fisheries and seaweed farming should take into consideration in preparing relevant actions.

4.2.7 Key findings

Based on the review of the three country projects as the case study we outline some key findings below:

1. The Norwegian funded projects support Indonesia's target to achieve marine debris reduction to 70% by 2025.
2. Marine debris is cross-cutting, inter-linked, involving multiple actors, and initiatives should be interlinked at the various levels of management.
3. The existing synergies may be expanded for development by incorporating them into wider national strategies including livelihood improvement and poverty alleviation, gender and health programs,

family welfare, encouraging literacy education, the movement of religious charity, and a strengthening of the informal sector.

4. Land-ocean integration policy is the right approach for marine plastic debris management.
5. Accelerating tourism development will support sustainable waste management.
6. Coordination between different project in the same geographical area need to be improved.
7. Plastic waste in agriculture production area is the problem that need to be addressed.
8. Small scale fisheries and seaweed aquaculture significantly contribute to marine plastic debris reduction.

4.2.8 Introduction

Combating marine litter and the spread of microplastics has become a priority for Indonesia. The central government has enacted the Presidential Regulation No. 83/2018 concerning marine debris handling to achieve the national target of reducing marine plastic debris by 70% by 2025. Do deliver on this ambitious political pledge, a National Coordination Team has been established in Indonesia, spearheaded by the Coordinating Ministry of Maritime Affairs and Investments (CMMAI). The Coordination is complex, the issue of plastic waste and marine debris cuts across sectors and requires broad contribution and coordination. All ministries are under the presidential degree obliged to do their part and to participate and the role of the coordinating ministry is to supervise the presidential decree implementation and to coordinate all related stakeholders including ministries, local governments, local communities and private sector actors. The National coordination Team is also mandated to develop policies to address bottlenecks and problems emerging through the implementation of activities as well as to monitor and evaluate the implementation. The enabling environment on which the national actions to combat marine litter and microplastics in Indonesia depend, would be described as follows:

1. An explicit and active commitment of the Government of Indonesia in reducing marine litter and microplastics. This is reflected in the commitment to clear and ambitious targets, the development of strategies and an institutional arrangement at the national level accommodated in the legislations.
2. Both the long-term national development plan (20 yrs) and the mid-term plan (5 yrs) coordinated by BAPPENAS include strategic priorities such as climate change, biodiversity and GHG emission, covering both the development aspect and the economic dimension, and marine litter is an integral part of these the national documents.
3. Ocean development has been an issue of growing concern and importance for Indonesia. Marine debris and plastic waste within the context of blue economy development has also become a main concern. This task and area of policy is also assigned to the Coordinating Ministry of Maritime Affairs and Investment.
4. Waste management is mandated to both the public works and environmental agencies at central, province and regency/city levels, with their separate obligation tasks (Law 23/2014).
5. Through the integrated land-ocean spatial planning policy (Law No. 11/2020) national and regional governments are directed to revise their terrestrial and ocean/coastal area plans in order to become one integrated map. This still is work in progress but can contribute to a better understanding and assessment of the distribution and sources of marine debris & microplastics from up and down streams, and thus to mitigate these.
6. Local governments, both at regency and city level, have budget allocation from national level with specific requirements provided through by the Ministry of Finance regulation.
7. Village government has a right to receive the Village Fund Allocation (*Dana Desa*) that is transferred from national budget. The income is used to development and community

empowerment expenses and may be potentially spent to actions those dealt with waste management at the village level.

8. Waste management has been an alternative source of income within the local community and especially in informal sectors. It is observed that number of *Bank Sampah* (waste bank) is growing.
9. A promising opportunity is emerging, as the village government can support sustainable waste management by establishing Village Regulation to develop activities including its financing.

In terms of policy support it can be said that Indonesia has successfully established cascading regulations to deal with marine debris handling. Some legislations regarding marine litter and microplastics in Indonesia is depicted in Table 1.

Table 1. Marine litter and microplastics related regulations

Law & regulations	Number & year	Concerning on
Law	No. 18 year 2008	Waste management
Law	No. 23 year 2014	Regional government
Law	No. 32 year 2014	Ocean
Law	No. 6 year 2014	Village
Government regulation	No. 81 year 2002	Household and household-like wastes management
Government regulation	No. 60 year 2014	Village fund derived from state budget
Government regulation	No. 27 year 2020	Specific waste management
Presidential regulation	No. 16 year 2017	Indonesia Ocean Policy
Presidential regulation	No. 97 year 2017	National policy & strategies on household and household-like wastes management
Presidential regulation	No. 83 year 2018	Marine debris handling
Coordinating Ministry of Maritime Affairs and Investment	No. 69 year 2019	Implementing team for national action plan on marine debris handling
Ministry of Home Affairs regulation	No 33 year 2010	Waste management guidelines
Ministry of Home Affairs regulation	No. 7 year 2021	Retribution tariff determination in waste handling implementation
Ministry of Finance regulation	No. 26 year 2021	Funding support of national budget for waste management in regional level
Ministry of Environment and Forestry regulation	No. 13 year 2012	Guidelines for reduce. reuse, recycle through waste bank
Ministry of Environment and Forestry regulation	No. 14 year 2021	Waste management in waste bank
Ministry of Environment and Forestry regulation	P.10/MENLHK/SETJEN/PLB.0/4/2018	Guidelines for regional policy and strategy on household and household-like wastes management
Ministry of Environment and Forestry regulation	P.75/MENLHK/SETJEN/KUM.1/10/2019	Roadmap for waste reduction by producers
Ministry of Environment and Forestry regulation	No. 6 year 2022	Information System on National Waste Management (SIPSN)

4.2.9 Country program overview

The Norwegian government has financially supported a portfolio of projects and actors through several funding- and partnership modalities. Three initiatives are presented in this overview, as examples within this portfolio of marine litter and microplastics projects funded by Norway. We have selected the following three country projects: (1) Support Facility Project for Marine Plastic Litter Reduction Acceleration Secretariat; (2) Clean Oceans through Clean Communities, and (3) STOP Marine Plastics.

4.2.9.1 Project 1: Support Facility Project for Marine Plastic Litter Reduction Acceleration Secretariat

The Government of Norway funds the Secretariat managed by UNDP Indonesia, mandated to strengthen and support the national platform for reducing marine plastic debris through the Presidential Regulation No. 83 as of 2018 (the project is here referred to as the *UNDP Secretariat project*). The Secretariat has two outputs to reduce marine debris: (1) To address identified gaps amongst the Ministries' programs and (2) to

strengthen the institutional arrangements for achieving the ambitious goal.[35] The project runs within the period 2019-2024 and is aimed at coordinating and facilitating the 5 (five) working groups related to the main implementation strategies under the National Action Plan.

The role of the Secretariat includes (1) Enhancing coordination among relevant government ministries/institutions[36], sub-national government, NGOs, and the private sector to collaborate in the reduction of marine plastic debris output; (2) Formulation of policies in addressing barriers regarding reduction of marine plastic debris output; (3) Monitoring and evaluating the activities included in the National Action Plan on Marine Debris Handling; and (4) Increasing public and targeted stakeholders' awareness on the importance of taking concrete actions to reduce marine debris led or coordinated by the Secretariat.

Coherence

The UNDP Secretariat project provides clear strategic synergies, and the Norwegian financial support is assessed to contribute to the achievement of the national targets regarding marine debris and plastic waste. This is primarily based the following: (1) Support is funneled into structures and initiatives that directly follows the Presidential policy together with its National Plan of Action; (2) the role of participating ministries and central institutions are prominent and key national actors for achieving national policy targets; (3) The national five strategies to combat marine litter cover the entire value chain; (4) Explicit response from the National Coordination Team and TKN personnel confirming that coordination of national implementation has been significantly strengthened through the financial support from Norway[37].

The Secretariat is a supporting instrument towards the national action plan on marine debris handling. It supports coordination of the TKN, provides an advisory service to the government, facilitates the dialogue between MoEF and private sector actors on EPR, and contributes to the initiation of key activities such as Interfaith Waste Charity Movement (GRADASI). This public awareness program has attracted partners to participate including GIZ, Danone, Denmark Government and Gojek as online transportation platform company. The Secretariat also ensures a more elaborate reporting on the annual action plan implementation. Through the project satellite-based calculation is conducted, as well as field monitoring, determining the origins of marine plastic litter. In addition, the efficiency of the national action plan (consisting of 59 activities) is evaluated through the support of the Secretariat in order to inform decision making and assessments of whether activities appropriately contribute to achieving the plan objectives.[38]

From the CMMAI perspective there is a perceived risk that some of the existing synergies ensured through Norway's support and role may have been somewhat dependent on the role and initiative of individuals in building close operational relationship between the Norwegian Embassy and the coordinators of the TKN. This is worth noting for continued follow-up at the RNE, as there has been staff rotation lately and relationships would need to be maintained. CMMAI further also expressed an interest in working closely with Norway on potential transfer of experience on business models for municipal waste management and the prevention and reduction of plastic waste.

CMMAI is further involved in supervising the World Bank-Oceans Multi Donor Trust Fund (MDTF) project. It is funded by Norway and Denmark for the period 2017-2022 (November)[39], with marine litter/plastic waste as a key component, where the recommendations with regard to plastic discharges from rivers and coastlines have resulted in the inclusion of waste collection infrastructure in the MDTF.

1.2. Effectiveness

The UNDP Secretariat project has provided indications towards achieving intended results with a clearly strengthened coordination mechanism and comprehensive cross-sectoral contributions to addressing

[35] UNDP, 2021. Support Facility Project for Marine Plastic Litter Reduction Acceleration Secretariat. Progress Report. November 2021.

[36] To implement the National Action Plan on Marine-Debris Handling (or RAN PSL) during 2018-2025, The National Coordination Team on Marine Debris handling (or TKN PSL) was formed under and directly responsible to the President of Indonesia. TKN PSL consists of 16 ministries/institutions (now become 18), with the CMMAI as the chairman and the MoEF acts as the daily chair. To assist the implementation of the duties assigned to TKN PSL, The Implementing Team on the National Action Plan (or TP RAN PSL) was established. There are 5 (five) strategies within TP RAN PSL, which are (1) National Movement to Increase the Stakeholders' Awareness; (2) Land-based Waste Management; (3) Waste Management in the Coastal and Marine Area; (4) Funding Mechanism, Institutional Strengthening, Observation, and Law Enforcement; and (5) Research and Development (UNDP, 2020).

[37] Based on our interview with the representatives from CMMAI (26/09/2022) in Jakarta

[38] Derived from the interview with the UNDP Indonesia (26/09/2022)

[39] Information was provided by World Bank (interview 27/09/2022 in Jakarta)

issues of marine litter as an inter-linked issue and priority. CMMAI express that the collaboration with UNDP and Norway is flexible, transparent and professional.

The approach of including a mobilization of religious and informal actors as an approach to strengthen and compliment the governmental initiatives underpins the UNDP Secretariat project's achievement of targets and objectives. The program of GRADASI and SIMBA (Waste Bank Information System) could perhaps be strengthened further, and at a wider scale in contributing to the marine debris reduction. This charity movement based on the mosque infrastructure could be an effective instrument in collecting support for addressing the issue of plastic waste/marine litter, given that Indonesia has the world's largest Muslim population. Building on the waste bank concept as part of informal sector inclusion is also important in order to support the transition towards a more formal waste management system.

1.3. Impact and Sustainability

The government of Indonesia is firmly committed to the agenda of the UNDP Secretariat project and this coherence in priorities provides a nurturing environment for impact and sustainability. The government is working actively towards achieving the marine debris reduction and to fulfil the national target by 2025, but although progress towards this ambitious 70% target has been significant so far, the target is truly ambitious and support form Indonesia's international partners is likely a prerequisite for success. Indonesia will require the continued support, and Norway has been a very dominant supporter so far.

The project's informal sector-related activities have a potential impact towards ensuring the poverty reduction aspects that are important to the Norwegian government. More attention can be given to the role of local development planning agencies at the provincial and regency/city level, in dealing with the informal sector related issues and to improve community mobilization and participation through deploying capacity building programs at local scale.

Some of the government initiatives supported by the Secretariat are anchored in and entail systemic changes, where government action is triggered, and alternatives identified by the Secretariat. The holistic approach to the marine litter issue with a government emphasis on livelihoods and poverty reduction comes across as an example of this.

The presidential election in Indonesia (scheduled for February 2024) will likely have impact on the sustainability of the UNDP Secretariate project, as the success of it is so inter-connected with government priorities and its synergies with government policy and priorities. The continuation of the marine litter program and the prominence of the marine litter issue in the next government agenda is not guaranteed.

4.2.9.2 Project 2: Clean Oceans through Clean Communities (CLOCC)

Project CLOCC is managed by Avfall Norge (Waste Norway) for the period of 2018-2023 to build effective, circular waste management systems that eliminate leakage of plastics into the ocean and increase resource efficiency. The project also aims to provide socio-economic benefits for local communities. In Indonesia the project has engaged in Jakarta, Banyuwangi and Bali, and is today implemented in Banyuwangi. CLOCC is partnering with International Solid Waste Association (ISWA) and Indonesia Solid Waste Management Association (InSWA) as a local partner.

The project consists of 4 work packages which are closely related to each other. The packages are: (a) WP1 Waste Management Training Program; (b) WP2 Waste Management Plans; (c) WP3 Support program for improved waste value chains and (4) WP4 Assessment of outcomes/results/follow-up tools.[40]

Coherence

Project CLOCC is by counterparts at the village and regency government perceived as **delivering capacity building and master plan development synergies**.[41] It aligns to the national strategy on marine litter in particular in the efforts to increase the stakeholders' awareness and institutional strengthening. CLOCC is also relevant to addressing root causes to plastic waste challenges and waste management challenges at

[40] Avfall Norge, 2018. 3 years capacity building program: Clean Oceans through Clean Communities Proposal

[41] We carried out the field visit to Banyuwangi at the villages of Kebon Dalem and Genteng Wetan on 29 September 2022.

the village and regency level.[42] Key stakeholders confirm that waste challenges are significant and that the project addresses real problems and concerns.

The project has initiated the master plan development in Banyuwangi. However, during the FGD[43] it was apparent that the officials face the issue of eligibility. Persons who are involved in the process are in lower government positions, who experience difficulties when it comes to approving and validating the plan. A priority for coherence and ownership would be to ensure that heads of represented agencies are actively engaged/included in some of the plan development activities, as this would provide some more assurance not only for the plan's appropriateness but also its proper implementation.

Waste is cross-cutting concept, and it involves multiple actors at the various levels of management. From our observation coordination and collaboration between agencies within the agencies and institutions at local government line has to be strengthened. The role of environmental agency or DLH is quite dominant in response to the bottlenecks of managing waste. It is believed that DLH is responsible for waste management. However, collaboration to reduce wastes requires relevant agencies to overcome the issue. It is also interesting that waste management issue is incorporated into the environmental part in the local government planning. Hence, the project frameworks are parallel with the Housing Area Development strategy run by BAPPEDA[44].

We also found that coordination between the different project management at the same geographical area need to be conducted. Intended community should have access to the project profiles to create their better understanding and perceptions. Project dissemination in particular from the local government to the local stakeholders should be improved. This is to avoid negative implications that undermine the project implementation.

Effectiveness

The potential of financial source at the village for managing waste is promising. Village government has allocated Village Fund Allocation or Anggaran Dana Desa (ADD) to the waste management at community level. Interventions by local authority towards waste issue at the village since 2020 was not working. The village does not understand how to deal with waste sorting and handling.

In order to achieve the project objectives there is a potential for and perhaps a need address the pricing model, both with regards to waste values and the waste handling fees. Examining ways of increasing the waste handling fees could make be necessary. Anecdotal indications were provided through the review, that the willingness to pay at community level could be at a level that would allow such a price/billing increase.

Impact and Sustainability

Indications that the project contributes to village employment were observed. Covid 19 caused a surge of people returning from former jobs in major cities, and many subsequently found employment in the waste sector as scavengers. The income from this employment provided under the CLOCC project modalities give local workers far better compensation as compared the alternatives available outside the project. The project is otherwise at a stage where it is hard to make assessments of impact and sustainability.

4.2.9.3 Project 3: STOP Marine Plastics

Project STOP (Stop Ocean Plastics) in Banyuwangi is implemented by SYSTEMIQ, an international hybrid consultancy/social enterprise. It was launched in July 2018 in partnership with the Banyuwangi Government in East Java, with the aim to strengthen the waste management system/approach and improve livelihoods

[42] Based on the statements delivered by the Head of Kebon Dalem village and the Banyuwangi's Chief of Staff

[43] It was done at the BAPPEDA office on 29 October 2022. The meeting was chaired by Expert Staff of Bupati Banyuwangi (formerly Head of DLH) and attended by representatives from Environmental Agency (DLH), BAPPEDA, Agricultural Agency (Distan) Public Works Agency (DPU), Family Welfare Program (PKK). From project side were Avfall Norge and INSWA (as STOP manager) together with Norad and KPMG team.

[44] BAPPEDA is a local development planning agency. Here refers to Banyuwangi government.

and local environmental conditions. The project is linked to CLOCC, as it seeks to implement Banyuwangi's Solid Waste Master Plan, which is being co-developed through the CLOCC program.

Project STOP has supported the two Banyuwangi villages Sumberberas and Tembokrejo with machines, infrastructure and equipment at their TPS3Rs and the community was provided with bins for organic and non-organic waste.

Coherence

The project is aligned with the Banyuwangi government targets and ambitions on waste management. The project has successfully developed appropriate implementation designs in waste collection.

The Banyuwangi government focuses on the **tourism development and regards waste management as a necessary area of priority to support this strategic focus**.[45] This creates a need to integrate tourism development and waste management to strengthen local development. Banyuwangi operates with the motto that *"all agencies in Banyuwangi are tourism agencies, all places are tourism destinations, and all activities are tourist attractions"*. Tourism is relevant to the Banyuwangi's environmental protection and development, and sustainable waste management is seen as part of it.

Project STOP has resulted the waste management pattern that deliver economic benefit in raising village funds. This output may be synergized with the Village Fund Allocation (*Alokasi Dana Desa*) from central government and financial subsidy from the regency government. Funding arrangement at the village set by Village Regulation (or *Peraturan Desa*) including the allocation for waste management is prospective.

Communication and coordination between related and similar projects in Banyuwangi must be given priority. Potential synergies seem to be lost today, as different initiatives supported by Norway do not fully align and coordinate with each other and intended project stakeholders. This alignment needs to be improved to ensure project management procedures are not overlapping and creating externalities that undermine project achievements.

Effectiveness

Project STOP increases waste collection and waste management, and the review clearly shows that the project creates socio-economic benefits for the local community in Tembokrejo. Its performance can be assessed through the additional income generation for the village from the management of TPS3R. It also provides employment for 38 workers including drivers both on and off sites. The project has also disseminated a concept where organic waste handling supports maggot farming, which again is used for livestock or aquaculture feed.

The project contributes to the achieved key performance index of environmental development in Banyuwangi with regard to the declined waste volume. This is resulted from the capacity building activities as well as the development of circular resource use infrastructure held within the project. The KPI also contributes to the national target on waste reduction.

One key challenge of the project management is the **remaining residual waste in the TPS.** During the project period the residual volume went down. However, because of community and individual awareness on waste handling is still problematic. The waste generation at household is increased again. The village parliament member in Tembokrejo informed us that waste residual now is estimated around 40% and the ideal one is 10-20%.

Impact and Sustainability

Project clearly gave positive impact to local employment, livelihood alternatives, poverty reduction and alternative income generating to the villages. Based on the discussion with the Head of village parliament and the Head of Muncar sub-district the exit strategy is needed to maintain the local community participation for years regarding waste handling. They are asking the Project persons how to tackle the situation even though the project has stopped. Anecdotal evidence and observations during the review could suggest that the TPS3R's operations in Sumberberas village came to an end when the donor funding period ended, as it was highly dependent on the donor support and too costly to be run based on ordinary funding streams within the waste value chain.

The Head of Parliament in Tembokrejo village raised this in relation to lack of capacity of waste facilities that were given to the community. This situation is exacerbated the newly planned development of landfill which is far away from TPS. Cost of waste transportation becomes more expensive. Community trust on the

[45] This statement came from the Chief of Staff (Regency Secretary) during the meeting conducted at Banyuwangi government office on 30 September 2022.

project performance that was maintained during the project time (2018-2021) may collapse if the household waste cannot be managed by the local authorities.

Trust plays a vital role in local development processes. Addressing and managing the expectations and behavior of the community and involving them in the development process is important as it encourages a sense of responsibility for the project/initiative and increases the chance for the results and effects of the project to be sustained even if the funding ceases.

Spatial planning policy also affects to the sustainability in waste management in Banyuwangi. The regency government has enacted their spatial planning (RTRW) regulation. However, it did not allocate the area for the new landfills development and creates conflict between local community and DLH as local authority. Banyuwangi has to revise its RTRW to ensure the locations. As the enactment of revised RTRW has to be approved by the central government, i.e. the Ministry of Agrarian Affairs and Spatial Planning.

Appendix 3: Detailed portfolio overview

Table 5 Complete program portfolio across review period, sorted by funding pledged by Norway as of 2022

Project	Organization	Time frame	Geography	NOK pledged
Total funding pledged (NOK)				**1 282 451 917**
No Plastic in Nature	WWF Norway	2018-2024	Global	161 307 999
Support to PROBLUE	World Bank	2018-2026	Global	140 234 000
UNEP Programme Cooperation	UNEP	2019-2021	Global	90 000 000
Further actions to address plastic waste under the Basel Convention	Secretariat of the BRS Conventions	2020-2022	Global	70 700 000
Plastic Waste Free Islands	IUCN	2018-2022	Caribbean Pacific	61 000 000
Ocean Plastic Turned into an Opportunity in Circular Economy (OPTOCE)	Sintef	2018-2023	China Viet Nam India	45 885 720
The Global Environment Facility (GEF) 7	GEF	2018-2022	Global	40 000 000
GloLitter Partnership project	International Maritime Organisation (IMO) and Food and Agriculture Organization (FAO)	2020-2024	Global	40 000 000
Clean Oceans through Clean Communities	Avfall Norge (Waste Norway)	2018-2023	Indonesia	39 750 000
Towards Zero plastics to the Seas of Africa	Sustainable Seas Trust	2019-2023	South Africa	39 700 000
Integrated Approach towards Sustainable Plastics Use and (Marine) Litter Prevention in Bangladesh	United Nations Industrial Development Organization (UNIDO)	2020-2024	Bangladesh	38 000 000

Project	Organization	Time frame	Geography	NOK pledged
India-Norway Cooperation Project on Capacity Building for Reducing Plastic and Chemical Pollution in India (INOPOL)	Norwegian Institute for Water Research (NIVA)	2020-2022	India	31 071 000
From trash to cash: turning plastic pollution into economic opportunity	Tearfund	2020-2023	Nigeria Global	30 179 750
GRID-Arendal Programme support	GRID-Arendal	2021-2024	Global	30 000 000
STOP Marine Plastics	SYSTEMIQ	2018-2021	Indonesia	30 000 000
Green Banyuwangi - Handling waste management	SYSTEMIQ	2021-2024	Indonesia	30 000 000
Clean Cities Blue Oceans (CCBO)	USAID	2022-2024	Indonesia Philippines Sri Lanka	30 000 000
CSE Mainstreaming Circular Economy	Centre for Science and Environment (CSE)	2020-2023	India	28 000 000
Building Resilience in the Eastern Caribbean through Reduction of Marine Litter and Pollution (ReMLiT)	Organization of Eastern Caribbean States Commission (OECS)	2019-2021	Eastern Caribbean States	27 000 000
ASEAN-Norwegian Capacity Building Project for Reducing Plastic Pollution (ASEANO)	Norwegian Institute for Water Research (NIVA), with Center for Southeast Asian Studies (CSEAS)	2019-2022	ASEAN countries	26 500 000
SINOPLAST Capacity Building for Reducing Plastic and Microplastic Pollution	Chinese Ministry of Ecology and Environment, The Basel Convention Regional Center for Asia and Pacific, and NIVA	2019-2022	China	26 000 000
Oceans, Marine Debris and Coastal Resources Multi-Donor Trust Fund for Indonesia	World Bank	2018-2027	Indonesia	21 500 000

Project	Organization	Time frame	Geography	NOK pledged
Marinforsk Norglobal	The Research Council of Norway	2019-2024	Regional	20 000 000
Countering Illegal Hazardous Waste Trafficking through the UNODC-WCO Container Control Programme	United Nations Office on Drugs and Crime (UNODC)	2020-2023	Cambodia Malaysia Philippines Viet Nam Thailand	16 900 000
Sound management, prevention and minimization of plastic waste	Secretariat of the Basel, Rotterdam and Stockholm (BRS) Conventions	2018-2022	Ghana Bangladesh Sri Lanka	15 000 000
Ending Plastic Pollution Innovation Challenge (EPPIC)	UNDP Viet Nam	2020-2022	Regional Viet Nam	14 256 000
Safe and environmentally sound ship recycling in Bangladesh, SENREC III	International Maritime Organization (IMO)	2020-2021	Bangladesh	14 000 000
Capacity Building on Waste Management in the Bago Region	Norwegian Institute for Water Research (NIVA)	2020-2022	Myanmar	12 250 000
EAF-Nansen Programme	FAO and IMR Norway	2017-2023	Global (Africa focus)	12 000 000
Marine Pollution Enforcement Project Phase II	INTERPOL	2019-2022	Global	11 100 000
Scaling Up a Socialized model of Domestic Waste and Plastic Management in Five Cities	UNDP Viet Nam	2019-2024	Viet Nam	10 821 120
Marine litter and mindset change in Mumbai	Afroz Shah Foundation	2019-2021	India	10 600 000
Support Marine Debris National Secretariat	UNDP	2019-2024	Indonesia	10 500 000
UNDP Ocean Innovation Challenge	UNDP	2020-2024	Global	10 000 000

Project	Organization	Time frame	Geography	NOK pledged
Coordinating and Providing a Common Platform for India- Norway Marine Pollution Initiative	UNEP New Delhi	2019-2022	India	8 784 211
Rehabilitation and waste management of El-Bared Irrigation System to reduce source-to-sea pollution and improve the livelihoods in the Akkar Region of Lebanon	FAO	2020-2022	Lebanon	8 575 000
Strengthening Environmental Education and Awareness	CEAR (Cooperativa de Educacao Ambiental Repensar)	2020-2023	Mozambique	7 700 000
Bali Partnership: From Commitment to Action	SYSTEMIQ	2018-2021	Indonesia	7 029 762
The Potential Human Health Impacts of Microplastic in the Environment	WHO	2018-2019	Global	4 000 000
Using Community Cookers to Prevent and Reduce Marine Litter	Community Cooker Foundation	2019-2020	Nairobi Kenyan coast	2 656 000
Building Movement for Indonesia Marine Debris	Yayasan Ekosistem Nusantara Berkelanjutan (EcoNusa Foundation)	2019-2020	Indonesia	1 860 000
Capacity and Community building work programme on combatting marine plastic pollution	New York University	2021-2022	Global SIDS	1 600 000
Building Support for a Binding Multilateral Agreement on Plastic Pollution in the African and Pacific Island Regions	Environmental Investigation Agency (EIA) UK	2019-2020	Africa Pacific Islands	1 466 555
Building knowledge to Combat Marine Litter	Brazilian Biodiversity Fund (Funbio) and the University in São Paulo.	2019-2021	Brazil	1 241 800

Project	Organization	Time frame	Geography	NOK pledged
Creating Strong Ecosystem to Implement Circular Economy in Indonesia	Greeneration Foundation	2019-2021	Indonesia	1 140 000
Plastic Pollution and Marine Litter Prevention: Advocacy through Empowerment, Narrative Change and Data Building	Association Zero Zbel	2019-2021	Morocco	1 100 000
Establishment of a Programme on Marine Litter and Microplastics	CEAN (Cooperativa de Educacao Ambiental Ntumbuluku)	2018-2019	Mozambique	1 043 000
Total funding pledged (NOK)				**1 282 451 917**

Table 6 Portfolio geography by amount of funding by Norway and number of projects, across program period

Geographical area	Projects	NOK pledged	Funding as % of total portfolio
Global	10	597 341 999	46,6 %
Indonesia	7	141 779 762	11,1 %
India	4	78 455 211	6,1 %
Bangladesh	2	52 000 000	4,1 %
Mozambique	2	8 743 000	0,7 %
Caribbean, Pacific	1	61 000 000	4,8 %
China, Viet Nam, India	1	45 885 720	3,6 %
South Africa	1	39 700 000	3,1 %
Nigeria, Global	1	30 179 750	2,4 %
Indonesia, Philippines, Sri Lanka	1	30 000 000	2,3 %
Eastern Caribbean States	1	27 000 000	2,1 %
ASEAN countries	1	26 500 000	2,1 %
China	1	26 000 000	2,0 %
Regional, Asia	1	20 000 000	1,6 %
Cambodia, Malaysia, Philippines, Viet Nam, Thailand	1	16 900 000	1,3 %
Ghana, Bangladesh, Sri Lanka	1	15 000 000	1,2 %
Viet Nam, Thailand, Philippines, Indonesia	1	14 256 000	1,1 %
Myanmar	1	12 250 000	1,0 %

Global, Africa focus	1	12 000 000	0,9 %
Viet Nam	1	10 821 120	0,8 %
Lebanon	1	8 575 000	0,7 %
Kenya	1	2 656 000	0,2 %
Global, Small Island Developing States	1	1 600 000	0,1 %
Africa, Pacific Islands	1	1 466 555	0,1 %
Brazil	1	1 241 800	0,1 %
Morocco	1	1 100 000	0,1 %
Grand total	**47**	**1 282 451 917**	**100 %**

Table 7 Overview of projects active in Indonesia and India funded under the Norwegian marine litter program

Project	Organization	Time frame	Geography	India and/or Indonesia	NOK pledged
Total	**25**				**922 218 692**
No Plastic in Nature	WWF Norway	2018-2024	Global	Indonesia	161 307 999
Support to PROBLUE	World Bank	2018-2026	Global	India, Indonesia	140 234 000
UNEP Programme Cooperation	UNEP	2019-2021	Global	India, Indonesia	90 000 000
Further actions to address plastic waste under the Basel Convention	Secretariat of the Basel, Rotterdam and Stockholm (BRS) Conventions	2020-2022	Global	India, Indonesia	70 700 000
Ocean Plastic Turned into an Opportunity in Circular Economy (OPTOCE)	Sintef	2018-2023	China Viet Nam India	India	45 885 720
The Global Environment Facility (GEF) 7	GEF	2018-2022	Global	India, Indonesia	40 000 000
GloLitter Partnership project	International Maritime Organisation (IMO) and Food and Agriculture Organization (FAO)	2020-2024	Global	India, Indonesia	40 000 000
Clean Oceans through Clean Communities	Avfall Norge (Waste Norway)	2018-2023	Indonesia	Indonesia	39 750 000
India-Norway Cooperation Project on Capacity Building for Reducing Plastic and Chemical Pollution in India (INOPOL)	Norwegian Institute for Water Research (NIVA)	2020-2022	India	India	31 071 000
STOP Marine Plastics	SYSTEMIQ	2018-2021	Indonesia	Indonesia	30 000 000

Green Banyuwangi - Handling waste management	SYSTEMIQ	2021-2024	Indonesia	Indonesia	30 000 000
Clean Cities Blue Oceans (CCBO)	USAID	2022-2024	Indonesia Phillipines Sri Lanka	Indonesia	30 000 000
CSE Mainstreaming Circular Economy	Centre for Science and Environment (CSE)	2020-2023	India	India	28 000 000
ASEAN-Norwegian Capacity Building Project for Reducing Plastic Pollution (ASEANO)	Norwegian Institute for Water Research (NIVA), with Center for Southeast Asian Studies (CSEAS)	2019-2022	ASEAN countries	Indonesia	26 500 000
Oceans, Marine Debris and Coastal Resources Multi-Donor Trust Fund for Indonesia	World Bank	2018-2027	Indonesia	Indonesia	21 500 000
Marinforsk Norglobal	The Research Council of Norway	2019-2024	Regional	India Indonesia	20 000 000
Ending Plastic Pollution Innovation Challenge (EPPIC)	UNDP Viet Nam	2020-2022	Regional Viet Nam	Indonesia	14 256 000
EAF-Nansen Programme	FAO and IMR Norway	2017-2023	Global, Africa focus	India Indonesia	12 000 000
Marine Pollution Enforcement Project Phase II	INTERPOL	2019-2022	Global	IndiaIndonesia	11 100 000
Marine litter and mindset change in Mumbai	Afroz Shah Foundation	2019-2021	India	India	10 600 000
Support Marine Debris National Secretariat	UNDP	2019-2024	Indonesia	Indonesia	10 500 000
Coordinating and Providing a Common Platform for India-Norway Marine Pollution Initiative	UNEP New Delhi	2019-2022	India	India	8 784 211

Bali Partnership: From Commitment to Action	SYSTEMIQ	2018-2021	Indonesia	Indonesia	7 029 762
Building Movement for Indonesia Marine Debris	Yayasan Ekosistem Nusantara Berkelanjutan (EcoNusa Foundation)	2019-2020	Indonesia	Indonesia	1 860 000
Creating Strong Ecosystem to Implement Circular Economy in Indonesia	Greeneration Foundation	2019-2021	Indonesia	Indonesia	1 140 000
Total	**25**				**922 218 692**

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Appendix 4: List of key documents consulted

Project documentation for the following projects

Afroz Shah Foundation: Marine litter and mindset change in Mumbai

Association Zero Zbel: Plastic Pollution and Marine Litter Prevention: Advocacy through Empowerment, Narrative Change and Data Building

Avfall Norge (Waste Norway): Clean Oceans through Clean Communities

Brazilian Biodiversity Fund (Funbio) and the University in São Paulo: Building knowledge to Combat Marine Litter

CEAR (Cooperativa de Educacao Ambiental Repensar): Strengthening Environmental Education and Awareness

Centre for Science and Environment (CSE): Mainstreaming Circular Economy

Community Cooker Foundation Using Community Cookers to Prevent and Reduce Marine Litter

Environmental Investigation Agency (EIA) UK: Building Support for a Binding Multilateral Agreement on Plastic Pollution in the African and Pacific Island Regions

FAO and IMR Norway: EAF-Nansen Programme

FAO Rehabilitation and waste management of El-Bared Irrigation System to reduce source-to-sea pollution and improve the livelihoods in the Akkar Region of Lebanon

Greeneration Foundation: Creating Strong Ecosystem to Implement Circular Economy in Indonesia

GRID-Arendal: Programme support

International Maritime Organisation (IMO)/FAO: GloLitter Partnership project

IUCN: Plastic Waste Free islands

Ministry of Ecology and Environment, China, the The Basel Convention Regional Center for Asia and Pacific, and the Norwegian Institute for Water Research (NIVA): SINOPLAST Capacity Building for Reducing Plastic and Microplastic Pollution

New York University: Capacity and Community building work programme on combatting marine plastic pollution

Norwegian Institute for Water Research (NIVA), with Center for Southeast Asian Studies (CSEAS): ASEAN-Norwegian Capacity Building Project for Reducing Plastic Pollution (ASEANO)

Norwegian Institute for Water Research (NIVA): Capacity Building on Waste Management in the Bago Region

Norwegian Institute for Water Research (NIVA): India-Norway Cooperation Project on Capacity Building for Reducing Plastic and Chemical Pollution in India (INOPOL)

Organisation of Eastern Caribbean States Commission (OECS): Building Resilience in the Eastern Caribbean through Reduction of Marine Litter and Pollution (ReMLiT)

Secretariat of the Basel, Rotterdam and Stockholm (BRS) Conventions: Further actions to address plastic waste under the Basel Convention

Secretariat of the Basel, Rotterdam and Stockholm (BRS) Conventions: Further actions to address plastic waste under the Basel Convention

SINTEF: Ocean Plastic Turned into an Opportunity in Circular Economy (OPTOCE)

Sustainable Seas Trust: Towards Zero plastics to the Seas of Africa

SYSTEMIQ Bali Partnership: From Commitment to Action

SYSTEMIQ: Green Banyuwangi - Handling waste management

SYSTEMIQ: STOP Marine Plastics

Tearfund: From trash to cash: turning plastic pollution into economic opportunity

The Global Environmental Facility: GEF 7

The Research Council of Norway: Marinforsk Norglobal

UNDP Viet Nam: Ending Plastic Pollution Innovation Challenge (EPPIC)

UNDP Viet Nam: Scaling Up a Socialised model of Domestic Waste and Plastic Management in Five Cities

UNDP: Ocean Innovation Challenge

UNDP: Support Marine Debris National Secretariat

UNEP New Delhi: Coordinating and Providing a Common Platform for India- Norway Marine Pollution Initiative

UNEP: Programme Cooperation

United Nations Industrial Development Organization (UNIDO): Integrated Approach towards Sustainable Plastics Use and (Marine) Litter Prevention in Bangladesh

United Nations Office on Drugs and Crime (UNODC): Countering Illegal Hazardous Waste Trafficking through the UNODC-WCO Container Control Programme

WHO: The Potential Human Health Impacts of Microplastic in the Environment

World Bank: Oceans, Marine Debris and Coastal Resources Multi-Donor Trust Fund for Indonesia

World Bank: Support to PROBLUE

WWF Norway: No Plastic in Nature

Yayasan Ekosistem Nusantara Berkelanjutan (EcoNusa Foundation): Building Movement for Indonesia Marine Debris

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Appendix 5: Consultation process (anonymized)

Interviews
Afroz Shah Foundation
Centre for Science and Environment (CSE)
Ministry of Environment, Forest and Climate Change
Mu Gamma Consultants
TERI
Toxics Link
SRM
CIPET
NIVA
Norwegian Embassy in India
SINTEF
UNEP
World Bank PROBLUE
ASEAN-Norwegian Capacity Building Project for Reducing Plastic Pollution (ASEANO)
ASEANO
Avfall Norge
Basel Convention Regional Centre
Coordinating Ministry for Maritime Affairs and Investment Indonesia
Danish Embassy in Indonesia
Econusa
Greeneration
Ministry of Environment and Forestry Indonesia
InSWA
National Development Planning Ministry (BAPPENAS) Indonesia
Norwegian Embassy in Indonesia
SYSTEMIQ
UNDP Marine Plastic Litter Reduction Acceleration Secretariat Indonesia
World Bank Oceans, Marine Debris and Coastal Resources Multi-Donor Trust Fund for Indonesia
World Wide Fund for Nature (WWF)
Survey Respondents
Adelphi Consult GmbH
AFROZ SHAH FOUNDATION
Antigua & Barbuda Waste Recycling Corporation (Rotary Club of Antigua Sundown)
Avfall Norge
Basel Convention Regional Centre for Asia and the Pacific
Borealis
Central Institute of Petrochemicals Eng & Technology (CIPET): SARP-LARPM, Bhubaneswar
Centre for Science and Environment
Cooperativa Repensar
Coordinating Ministry for Maritime Affairs and Investment Indonesia
Department of Environment
Department of Environment/ Ministry of Health, Wellness and the Environment
EcoNusa Foundation
Food Agriculture Organization of the United Nations
Fundo Brasileiro para a Biodiversidade - FUNBIO
Government of the Republic of Vanuatu
Grenada Solid Waste Management Authority
GRID-Arendal
International Union for the Conservation of Nature (IUCN)
International Maritime Organization
International Solid Waste Association (ISWA)
MINISTERE DES RESSOURCES ANIMALES ET HALIEUTIQUES
Ministry Environment and Forestry
Ministry of Public Works and Transports of the Republic of Costa Rica

Mu Gamma Consultants Private Limited, Gurugram, India
National Development Planning Ministry (BAPPENAS) Indonesia
National Solid Waste Management Authority
NIVA
Norwegian Institute for Water Research (NIVA)
Organization of Eastern Caribbean States
PT Systemiq Lestari Indonesia
SINTEF
SRM Institute of Science and Technology
State Department for Shipping and Maritime
Sustainable Seas Trust
Tearfund
The Energy and Resources Institute
Toxics Link
UN Development Programme
UN Office on Drugs and Crime
UNDP
UNDP Indonesia
UNDP Marine Plastic Litter Reduction Acceleration Secretariat Indonesia
Unite Caribbean
United Nations Industrial Development organization (UNIDO)
United Nations Industrial Development Organization
Wills Recycling Ltd
World Bank
World Wide Fund for Nature – WWF
World Wide Fund for Nature (WWF-Kenya)
World Wide Fund for Nature Philippines
WWF Coral Triangle Program
WWF South Africa
WWF-China

Appendix 6: Results tracking at project level

Projects with indicators and reporting sufficient for quantitative results measurement

Centre for Science and Environment (CSE) Mainstreaming Circular Economy
Output 1.1 Number of cities that have voluntarily participated in forum assessment
Output 1.2 Number of model schools created
Output 1.2 Number of students covered
Output 1.3 Number of trainings
Output 1.3 Number of govt. officials trained
Output 1.3 Number of nongovernment stakeholders trained
Output 1.4 Number of national exposure visits (per year)
Output 1.4 Number of participants (per year)
Output 1.4 Number of international exposure visits (per year)
Output 1.4 Number of participants (per year)
Output 1.4 Number of meetings (per year)
Output 1.4 Number of participants (per year)
Output 1.5 Number of test conducted (per year)
Output 1.6 Number of research papers
Output 1.6 Number of inputs in government policy development/amendments
Output 1.7 Number of cities that have received help and inputs on byelaws

Output 1.8 Number of press releases

Output 1.8 Number of articles in Down to Earth magazine

Output 1.8 Number of media engaged

Output 1.8 Number of articles published in national/regional newspapers

Output 1.8 Number of videos

Output 2.1 Number of ward mapping surveys on waste management conducted in Agra

Output 2.2 Number of capacity building events

Output 2.3 Number Laws and guidelines on solid waste management in UP & Haryana / NCR

Output 2.4 Number of articles triggered in newspapers in UP & Haryana/NCR

WWF Norway No Plastic in Nature

Outcome indicator 1.1; # of states supporting the adoption of a new international treaty to regulate marine plastic pollution

Outcome indicator 1.2: UN General Assembly or UNEA negotiation mandate for a new legally binding agreement in place

Outcome indicator 2.1; # of governments that have committed to take the first steps for introduction of Extended Producer Responsibility (EPR) in their legal framework:

Outcome indicator 2.2; # of global consumer goods companies, with a market share larger than 10%, taking responsibility for end-of-life impact of their own products and packaging

Outcome indicator 2.3; # of regional companies make public commitments that they will also take responsibility for the end-of-life impact of their own products and packaging:

Outcome indicator 3.1; # of cities and tourism destinations committed to becoming Plastic Pollution Free Cities:

Outcome indicator 4.1; Number of African states expressing support for a new legally binding instrument:

World Bank Support to PROBLUE

1.1 Workshops, trainings, and consultations conducted (number)

1.2 Workshops, trainings, and consultations conducted (number)

1.3 Knowledge products prepared (number)

1.4 Approved PROBLUE supported proposals with gender analysis and gender focused approaches and strategies (number; %)

1.5 Approved PROBLUE supported proposals with climate change specific data and analytics (number; %)

1.6 Approved PROBLUE supported proposals with MFD-specific data and analytics (number; %)

1.7 Approved PROBLUE supported proposals relevant to FCV context (number; %)

2.1 Beneficiaries (number)

2.2 WBG operations informed (number)

2.3 WBG resources leveraged ($ billion)

2.4 Leverage ratio: WBG operations informed ($) / PROBLUE funding (number)

2.5 WBG operations that will reduce net GHG emissions (number)

2.6 WBG operations that will reduce ghost gear (number)

2.7 WBG operations that will increase men's and women's equal economic opportunities in traditional and/or new economic sectors (number)

2.8 WBG operations that will increase men's and women's equal awareness of gender issues, economic opportunities and related risks (number)

2.9 WBG operations that will increase men's and women's equal participation in planning and decisionmaking on the blue economy (number)

2.10 WBG operations which will increase the number of genderbased violence prevention and response practices in relation to the blue economy (number)

2.11 WBG operations that will increase the number of women's rights organizations consulted and involved in seascape planning (number)

2.12 WBG operations that will decrease the number of households in coastal areas vulnerable to erosion and flooding (number)

2.13 WBG operations that will increase the number of fisheries under sustainable management (number)

2.14 WBG operations that will increase the value from improved handling from fisheries under improved management (number)

2.15 WBG operations that will increase the sustainable production in aquaculture (number)

2.16 WBG operations that will increase the number of countries with public disclosure of all important fisheries-related information (number)

2.17 WBG operations that will reduce leakage of plastics to the environment (number)

2.18 WBG operations that will increase the number of plastic product value chains with application of Circular Economy approaches (number)

2.19 WBG operations that will increase the number of households connected to solid waste management services (number)

2.20 WBG operations that will increase the agricultural area under improved practices to reduce leakage of pesticides and/or fertilizers (number)

2.21 WBG operations that will increase the number of coastal and marine pollution hotspots managed for reduced environmental impacts (number)

2.22 WBG operations that will increase the electricity generation from environmentally sound offshore sources (number)

2.23 WBG operations that will improve desalination practices to become environmentally friendly (number)

2.24 WBG operations that will increase the number of coastal tourism hotspots under improved environmental destination management (number)

2.25 National policy reforms in fisheries & aquaculture informed (number)

2.26 National policy reforms in marine pollution management informed (number)

2.27 National policy reform in offshore energy with due environmental and social considerations informed (number)

2.28 National policy reform in shipping & transport (including desalination) informed (number)

2.29 National policy reform in coastal tourism informed (number)

2.30 Investment cases in PROBLUE relevant sectors presented to potential investors (number)

2.31 Countries with strengthened engagement in the blue economy at regional level (number)

SYSTEMIQ Bali Partnership: From Commitment to Action

OUTCOME A.1 At least 1 trial of a new regency level waste governance system

OUTCOME A.1 Detailed discussions within government about whether to change waste governance structure (e.g., at least 1 provincial public consultation held to propose the re-centralization of waste handling operations responsibility).

OUTCOME A.1 Detailed discussions within government about whether to change waste governance structure (e.g., at least 1 national public consultation held to propose the re-centralization of waste handling operations responsibility).

OUTPUT A.1.1 Findings from the study are presented to local, provincial and national governments in an assembly and documented in a report. 1 assembly

OUTPUT A.1.1 Findings from the study are presented to local, provincial and national governments in an assembly and documented in a report. 1 report

OUTPUT A.1.1 Findings from the study are presented to local, provincial and national governments in an assembly and documented in a report. 50 participants

OUTPUT A.1.2 10 officials attended study tour to learn about BLUD governance system.

OUTPUT A.1.3 1 example of waste handling operations at regency level with BLUD governance system is established in 1 regency as a proof of concept.

OUTCOME A.2 New funding/revenue sources available to operate waste handling systems.

OUTPUT A.2.1 Findings from the study are presented to local, provincial and national governments in an assembly and documented in a report. 1 assembly

OUTPUT A.2.1 Findings from the study are presented to local, provincial and national governments in an assembly and documented in a report. 1 report

OUTPUT A.2.1 Findings from the study are presented to local, provincial and national governments in an assembly and documented in a report. 50 officials attending

OUTPUT A.2.2 At least one new funding/revenue source is piloted for pilot BLUD in one regency.

OUTCOME B.1 At least 2 high leakage sub-districts receive private or public funding through secretariat to implement collaborative approach to solving leakage at a sub-district level - MoU.

OUTCOME B.1 At least 2 high leakage sub-districts receive private or public funding through secretariat to implement collaborative approach to solving leakage at a sub-district level - news coverage.

OUTPUT B.1.1 At least 3 meetings held

OUTPUT B.1.1 At least 10 agencies and institutions involved in the consultation.

OUTPUT B.1.2 A new governance structure established and consists of: Steering Board, Consultative Board (Including Team of Experts), Tender Committee. MoU established

OUTCOME B.2: At least 5 (out of 9) regency DLH commit to attending training and to apply lessons learned in their regencies.

OUTPUT B.2.1 At least 100 participants representing Bali province, 8 regencies and 1 city (DLH, kecamatan, village, waste operators, Desa Adat) attend best practice training.

OUTPUT B.2.2 Live website

SYSTEMIQ STOP Marine Plastics

IMPACT A Quantity plastic waste entering ocean (flux) from Muncar, tons reduction per year

OUTCOME A.1 Percentage of households served by waste collection services

OUTCOME A.2 Number of tons of waste collected from households and businesses per day and delivered to TPST 3R

OUTPUT A.2.1 Number TPST 3R operated

OUTPUT A.3.2 Person-hours of training or on-the-job capacity building received

OUTCOME B.1 % of households that sort their waste

OUTCOME B.2 Tons of non-organic material recycled

Output C.2.1 Number of hostspots cleaned by community

IMPACT D Interest by other organizations/funders to scale up STOP to other cities

Output D.1.1 Number of forum presentations

Output D.1.1 Number of media articles

Output D.1.1 Inclusion of stories/tools/methodologies on the STOP website

Output D.1.1 Number of Muncar STOP Program tours

Output D.1.2 Monitoring indicators defined

Output D.1.2 Database system developed

IMPACT E Training and development program within STOP created

UNDP Viet Nam Ending Plastic Pollution Innovation Challenge (EPPIC)

Outcome 1 # selected innovative solutions financed by investors

Output 1.1: # of plastic baseline assessments conducted in project sites

Output 1.1: # of consultations conducted with local stakeholders to define the main challenge to be tackled (including with the private sector) by the solutions to be identified/selected

Output 1.1: # of press/online publications about EPPIC

Output 1.1: # of applications to the (EPPIC) challenge

Output 1.1: # of EPPIC solutions which have been identified and shortlisted for the 3-month incubation stage

Output 1.1: # of women-led solutions identified & shortlisted

Output 1.2: # of solutions selected as EPPIC winners for incubation training/impact acceleration

Output 1.2: Amount of plastic waste (tons) prevented or treated by the awarded innovative solutions during implementation

Output 1.3: Availability of technical support to localities for implementation and dissemination of the solutions

Output 1.3: Studies on replication potential of the solutions to other localities

Outcome 2 # of partners that collaborate with the ASEAN Centre on Combating Marine Debris in Viet Nam and ASEAN

Outcome 2 # of implemented actions, solutions, or initiatives for marine plastic management disseminated among ASEAN countries

Output 2.1: % of citizens who support a ban on plastic single-use items in Viet Nam

Output 2.1: % ratio of increased awareness of the plastic waste hierarchy among key target group (citizens)

Output 2.1: # of global and national communication campaigns on plastic pollution

Output 2.2: Standard Operational Procedures (SOP) developed for the establishment of the ASEAN Centre on Combating Marine Debris in Viet Nam

Output 2.2: # of trainings/meetings/workshops on reducing plastic pollution organised

Output 2.2: % of women participating in the above training

Output 2.2: # methodology to measure & assess plastic waste and pollution developed

Output 2.3: # of lessons learned and best practices disseminated from the EPPIC project within ASEAN countries

UNDP Viet Nam Scaling Up a Socialised model of Domestic Waste and Plastic Management in Five Cities

Output 1.1 5 projects are funded and implemented by local NGOs/CSOs to address issues of waste and plastic management

Output 1.1 5 reports available (in English/Vietnamese) summarising key findings on the waste management systems, in five sites

Output 1.2 10 training capacity building workshops conducted in five sites (by 2021)

Output 1.2 5 partnership platforms in 5 cities (by 2021)

Output 1.3 10 training programs targeting waste collectors are conducted in five cities (2021)

Output 1.3 5 revolving funds established & managed by Women's Union (2021)

Output 1.3 600 beneficiaries of the revolving funds (#women and #men) (2021)

Output 2.1 40% increase in citizens' awareness of waste and plastic

Output 2.1 2 communication campaigns on waste and plastic

Output 2.1 2 local events in each city

Output 2.1 1 mobile app deployed to map plastic waste

Output 2.2 10 corporate regulations on sustainable production and consumption of materials adopted (2021)

Output 2.2 10 businesses trained on the Circular Economy approach/on-premises (2021)

Output 2.3 3 cities adopted/strengthened local regulations on waste or plastic (by 2021)

Output 2.3 Mapping of plastic lifecycle in 1 site

Output 2.4 1 technical guidance for policy experimentation

Output 2.4 1 network, data & knowledge platform on circular economy for VN

INTERPOL Marine Pollution Enforcement Project Phase II

Outcome 1.1 % increase in number of countries providing operational reports on Marine Pollution offences to INTERPOL

Outcome 1.2 Number of cross-border cases, where INTERPOL facilitated exchange of information between countries (via notices, diffusions, reports or alerts)

Outcome 1.3 %increase in number of countries that confirmed use of INTERPOL guidelines/training material to support planning or implementation of their national operation

Output 1.1 Number of Investigative Support Teams* (ISTs) deployed to support member countries in national or transnational investigations related to marine pollution crime

Output 1.2 Number of Analytical reports and briefings shared with national authorities

Output 2.1 Number of Capacity building and training activities delivered.

Output 2.2 % increase in number of female participants in CBT activities

Output 3.1 Number of ODA countries participating in global, regional or national operations facilitated by Marine Pollution Enforcement Project

Output 4.1 Organization of the Annual meetings of the PCWG

World Bank Oceans, Marine Debris and Coastal Resources Multi-Donor Trust Fund for Indonesia

1 Results of analytical work on priority ocean management challenges are disseminated to key policy-makers at the local and national level.

2 A national coordination mechanism on Indonesia's ocean policy, marine debris, and coastal resources meets at least once per year
with at least four ministries participating.

1.1 Analytic reports disseminated (Number)

1.2 Annual high-level policy dialogue meetings with government,
donors, and private sector conducted (Number)

1.3 Cross-ministry implementation monitoring system improved

2.1 Analytical studies to inform decision-making on actions to reduce
marine debris have been disseminated

2.2 Financing plan for improved marine debris management, which leverages existing SWM activities has been developed

2.3 Policy and local action plans for reducing marine debris developed
and funded in (X number) target cities

2.4 Communications blueprint (strategy and action plan)on reducing marine debris developed and implemented

3.1 Gaps in existing knowledge on quantity and quality of mangroves in Indonesia are identified, and action plan for gap filling developed

3.2 Policy and institutional analysis for strengthening management of coastal and marine resources

3.3 Multi-stakeholder dialogue on policy and activities for sustainable management of coastal resources conducted at least once a year

3.4 Analytical studies to inform decision-making on actions to enhance the resilience of coastal and marine resources have been disseminated

Projects supplying adequate results frameworks with their application

Project	Organization	Time frame
No Plastic in Nature	WWF Norway	2018-2024
Support to PROBLUE	World Bank	2018-2026
UNEP Programme Cooperation	UNEP	2019-2021
Further actions to address plastic waste under the Basel Convention	Secretariat of the Basel, Rotterdam and Stockholm (BRS) Conventions	2020-2022
Plastic Waste Free islands	IUCN	2018-2022
Ocean Plastic Turned into an Opportunity in Circular Economy (OPTOCE)	Sintef	2018-2023
GloLitter Partnership project	International Maritime Organisation (IMO)/FAO	2020-2024
Clean Oceans through Clean Communities	Avfall Norge (Waste Norway)	2018-2023
Towards Zero plastics to the Seas of Africa	Sustainable Seas Trust	2019-2023
India-Norway Cooperation Project on Capacity Building for Reducing Plastic and Chemical Pollution in India (INOPOL)	Norwegian Institute for Water Research (NIVA)	2020-2022
From trash to cash: turning plastic pollution into economic opportunity	Tearfund	2020-2023
STOP Marine Plastics	SYSTEMIQ	2018-2021
Green Banyuwangi - Handling waste management	SYSTEMIQ	2021-2024
GRID-Arendal Programme support	GRID-Arendal	2021-2024

CSE Mainstreaming Circular Economy	Centre for Science and Environment (CSE)	2020-2023
ASEAN-Norwegian Capacity Building Project for Reducing Plastic Pollution (ASEANO)	Norwegian Institute for Water Research (NIVA), with Center for Southeast Asian Studies (CSEAS)	2019-2022
SINOPLAST Capacity Building for Reducing Plastic and Microplastic Pollution	Ministry of Ecology and Environment, China, the The Basel Convention Regional Center for Asia and Pacific, and the Norwegian Institute for Water Research (NIVA)	2019-2022
Oceans, Marine Debris and Coastal Resources Multi-Donor Trust Fund for Indonesia	World Bank	2018-2027
Further actions to address plastic waste under the Basel Convention	Secretariat of the Basel, Rotterdam and Stockholm (BRS) Conventions	2018-2022
Ending Plastic Pollution Innovation Challenge (EPPIC)	UNDP Viet Nam	2020-2022
EAF-Nansen Programme	FAO and IMR Norway	2017-2023
Marine Pollution Enforcement Project Phase II	INTERPOL	2019-2022
Scaling Up a Socialised model of Domestic Waste and Plastic Management in Five Cities	UNDP Viet Nam	2019-2024
Support Marine Debris National Secretariat	UNDP	2019-2024
Coordinating and Providing a Common Platform for India- Norway Marine Pollution Initiative	UNEP New Delhi	2019-2022
Rehabilitation and waste management of El-Bared Irrigation System to reduce source-to-sea pollution and improve the livelihoods in the Akkar Region of Lebanon	FAO	2020-2022
Strengthening Environmental Education and Awareness	CEAR (Cooperativa de Educacao Ambiental Repensar)	2020-2023

Bali Partnership: From Commitment to Action	SYSTEMIQ	2018-2021
Creating Strong Ecosystem to Implement Circular Economy in Indonesia	Greeneration Foundation	2019-2021
Building Movement for Indonesia Marine Debris	Yayasan Ekosistem Nusantara Berkelanjutan (EcoNusa Foundation)	2019-2020

Projects which supply adequate results frameworks with indicators which are SMART

Project	Organization	Time frame
No Plastic in Nature	WWF Norway	2018-2024
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Building Movement for Indonesia Marine Debris	Yayasan Ekosistem Nusantara Berkelanjutan (EcoNusa Foundation)	2019-2020

Projects which supply adequate results frameworks, have SMART indicators, and report effectively on their results frameworks

Project	Organization	Time frame
No Plastic in Nature	WWF Norway	2018-2024
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Scaling Up a Socialised model of Domestic Waste and Plastic Management in Five Cities	UNDP Viet Nam	2019-2024
Bali Partnership: From Commitment to Action	SYSTEMIQ	2018-2021

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