

2021 Annual Report







Contents

Foreword	04
About Us	07
Achievements in 2021	10
Media and Outreach	23
Organizational Developments	27
Outlook for 2022	29
Financial Overview	32
Partners and Collaborators	34

Foreword



Across industries, including the waste management and recycling sector, 2021 was a year of recovery and rebuilding.

Despite economic growth in many regions, the devastating impact of the pandemic persisted, with new waves of the virus and millions of lives lost. The pandemic has exacerbated the plastic pollution crisis via a surge in medical waste and single use plastic. During the pandemic, more than eight million tonnes of plastic waste were generated globally, with over 25,000 tonnes entering the oceans. The International Solid Waste Association estimated that single-use plastic consumption rose by 250 to 300%.

This pandemic-related proliferation of plastic waste makes it even more evident that stakeholders across the value chain - brands, retailers, packaging manufacturers, policy makers, investors, and more - must work together to take a systems approach to reducing plastic pollution and create circular and inclusive plastic value chains. The Circulate Initiative's mission and portfolio of work is grounded in this systems perspective, and to this end, we delivered a number of key initiatives in 2021 across our two main pillars of work; insights and incubation.



"The pandemic has exacerbated the plastic pollution crisis via a surge in medical waste and single use plastic."

Highlights from 2021

We launched the Plastic Lifecycle Assessment Calculator for the Environment and Society (PLACES) in September, Asia's first calculator that allows users to quantify the climate change and other environmental benefits of plastics recycling. With PLACES, investors, entrepreneurs, and policymakers can access reliable, market-specific data to inform their decisions on investments in recycling.

The Incubation Network, our joint initiative with SecondMuse, advanced its established accelerator programs in South and Southeast Asia and launched new programs including Leakage and Livelihoods and Equality in Plastics Circularity. These programs focus on enabling new waste management solutions whilst ensuring better livelihoods and social protection for women waste workers.

In collaboration with the Alliance to End Plastic Waste, we launched the Closing the Data Gap Challenge with the goal of supporting promising research studies in India, Malaysia, and the Philippines. We invited applicants to showcase how their research can address data gaps in municipal solid waste and the plastic waste value chain in their regions.

In December, we partnered with Delterra to publish "Making 'Cents' of Recycling Behavior: The Return on Investment of Spreading the Recycling Habit." This research paper builds a strong case for investing in behavior change to finance infrastructure and generate positive recycling outcomes in emerging economies.

Looking ahead to 2022

2022 will be a consequential year for addressing plastic pollution. In March, 175 countries agreed to negotiate a global, legally-binding treaty aimed at reducing plastic waste across production, design, and disposal. We are hopeful that the treaty will pave a path towards long-term elimination of plastic pollution and greater adoption of a circular economy approach to plastic production and consumption.

In 2022, our insights work will focus on new areas and studies including regional plastic waste mapping, pricing in the recycled plastics value chain, and responsible sourcing. We will also release the second edition of PLACES, expanding the tool's geographical reach to include coverage of Malaysia, Thailand, the Philippines, and Vietnam. The Incubation Network will continue to strengthen its existing programs with a key focus on supporting small to mid-sized enterprises in Thailand and Indonesia to embed their ventures into existing local waste management systems to scale solutions faster.

With the value of the ocean economy projected to increase to US\$ 3 trillion by 2030, we see an opportunity for The Circulate Initiative to play a key role in bridging the finance gap and paving the path for more sustainable investment frameworks for tackling plastic pollution. Specifically, we intend to bring together solutions from our on-the-ground programs and sources of private and public capital committed to investing in these solutions.

We are thrilled that The Circulate Initiative team has grown by five and our Board by two since the beginning of 2021 - you can learn about them later in this report. Our new colleagues bring great expertise and enthusiasm to help drive our mission of ending ocean plastic pollution and building thriving, inclusive economies.

We are deeply grateful for the support of our partners and collaborators, particularly our founding funders Circulate Capital and the Alliance to End Plastic Waste.

With gratitude and optimism for the future.

Michael Sadowski
Interim Executive Director







"With the value of the ocean economy projected to increase to US\$ 3 trillion by 2030, we see an opportunity for The Circulate Initiative to play a key role in bridging the finance gap and paving the path for more sustainable investment frameworks for tackling plastic pollution.

Specifically, we intend to bring together solutions from our on-the-ground programs and sources of private and public capital committed to investing in these solutions."



About Us

About Us

The Circulate Initiative is a non-profit organization committed to solving the ocean plastic pollution challenge and advancing the circular economy in South and Southeast Asia. In partnership with key industry stakeholders, we work to build more circular, inclusive, and investible waste management and recycling systems.



The Circulate Initiative pursues two key strategies to achieve its goals: incubating new solutions and developing research and insights.

Incubation

We support entrepreneurs, innovators, and city planners globally to source, enable, and scale solutions that tackle the ocean plastic problem. Our goal is to increase the number and quality of promising ventures in South and Southeast Asia, provide essential financial and technical support, and strengthen the ecosystems that will enable the ventures' success.

Our flagship program, <u>The Incubation Network</u>, in partnership with <u>SecondMuse</u>, facilitates programs in the region that drive innovation, investment, and inclusivity around waste management, recycling, and circular economy solutions.

Insights

Our subject matter experts develop research, analysis and tools to identify and fill data and insights gaps that hinder efforts to solve the plastic pollution problem. We leverage our network of strategic partners to advance our research agenda and lead actionable studies that enable innovators, investors, and other decision-makers to take action.

We make our methodologies and research freely available to facilitate knowledge sharing and build a body of resources to empower key stakeholders in the plastic waste ecosystem.



The Plastic Pollution Crisis in Numbers

11 million

metric tons of plastic waste enter the oceans every year, with this number projected to triple by 2040

15 of the world's top 20 polluting rivers

flow through Asia, indicating a significant opportunity to drive solutions in the region

US\$ 149 billion

per year in funding is needed to address the UN's Sustainable Development Goal aimed at conserving oceans, seas, and marine resources

80%

of plastic pollution can be reduced by 2040 if key system interventions across the plastics value chain are implemented

Almost

150 million tonnes

of GHG emissions can be eliminated through the prevention of all plastic leakage in India and Indonesia by 2030

US\$ 324 billion

in economic growth and 1.5 million jobs created by 2025 are the predicted results if circular economy principles are adopted in Asia



Our Milestones to Date



276 startupssupported, 43% of
which are female-led



US\$ 1.5
million
in funding to startups
and other projects



1,100+ hours

of mentorship from close to 200 industry experts to entrepreneurs in our network



US\$ 48 million

additional capital raised by startups after receiving support from The Incubation Network

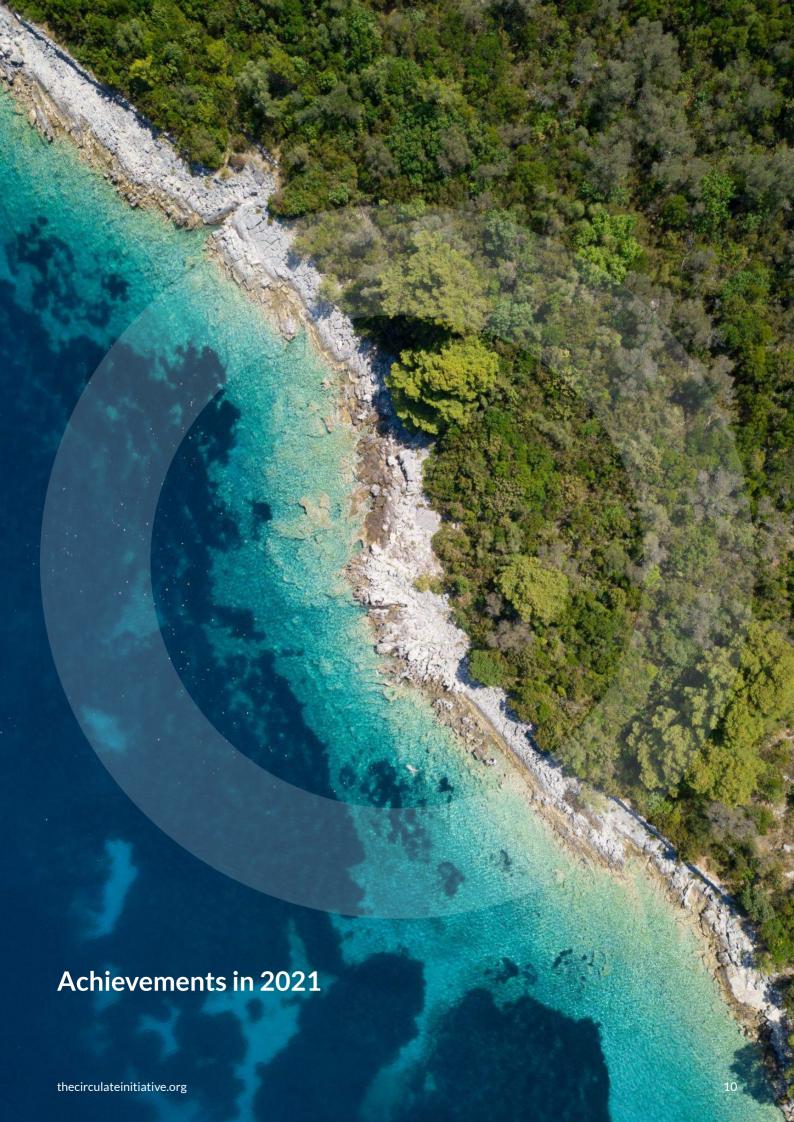


Launched
Asia's first

open-access greenhouse gas emissions calculator, PLACES



41,672
metric tonnes of plastic
waste diverted*



Achievements in 2021



The Incubation Network

The Incubation Network is focused on strengthening entrepreneurial ecosystems and supporting startups and entrepreneurs in plastic waste management and recycling systems in collaboration with a diverse network of partners.

Entrepreneur support organizations (ESOs) are central to The Incubation Network's approach. Broadly defined as local or regional groups that support the growth of entrepreneurs in their respective markets, ESOs enable expansion of reach and support to local entrepreneurs and startups with relevant in-country expertise and knowledge. To date, The Incubation Network supports a total of 68 accelerators, incubators, corporate, venture, and academic partners across our network, as well as seven ESO programs that are running pilots with entrepreneurs in India, the Philippines, and Vietnam.



Photo courtesy of Centre for Social Research and Development



An overview of The Incubation Network's key activities in 2021:

Regional Inclusive Markets Programs



The team behind Recube Circular Solutions, which developed Refillable, a portable refill solution in India that eliminates single-use plastic packaging by refilling consumer products at their doorstep. Photo courtesy of Recube Circular Solutions

2021 Global Innovation Challenge: The Future of Flexibles

Initiated in February 2021, the second edition of the Global Innovation Challenge focused on solutions to flexible plastic waste in Asia. The challenge received over 20 applications from entrepreneurs, companies, designers, and other organizations from 30 countries.

A cohort of 15 companies was shortlisted across four core solution areas: Refill Models, Advanced Recycling Technologies, Alternative Materials, and Recycling and Upcycling. After a growth program of three months to refine the business models behind each participant, the challenge culminated with the Beyond-A-Pitchfest event.

Attended by over 200 corporate partners, circular economy experts, investors, and donors, the event focused on exploring investment and strategic partnership opportunities to propel the ideas and solutions of the final cohort.

"The Future of Flexibles program was a valuable resource in connecting startups with other startups and fostering a constructive environment where ventures learn from each other's experiences and support each other's growth."

Jennifer Le Roy Chief Technology Officer, Novoloop

SHOWCASE

Novoloop

Novoloop is an advanced upcycling company that transforms packaging waste into high-performance materials used in shoes, cars, homes, and more.

According to Novoloop, their materials perform like those made from virgin fossil fuels and contain up to 50% post-consumer recycled content and reduce GHG emissions by up to 45%. Novoloop <u>raised a further \$11 million dollars</u> from their series A financing in February 2022.

Through the 2021 Global Innovation Challenge: Future of Flexibles program:

- Novoloop established stronger connections with fellow downstream companies.
- The company built their capacity in areas like risk awareness through the continuous dialogue and feedback received through the numerous workshops, events, and curated mentorship experiences.



Novoloop's technology breaks down end-of-life polyethylene plastic waste into smaller molecule building blocks which are in turn purified and upcycled into longer-lasting, higher-value polymers for a variety of products. Photo courtesy of Novoloop



An overview of The Incubation Network's key activities in 2021:

Regional Venture Support Programs and Resources



Plastics X Circularity Curriculum

Launched in June, the Plastics X Circularity
Curriculum is the first program in the region
designed to fast-track startups by providing
resources to apply a circular economy approach to
plastic waste management practices.

The curriculum is designed across three core learning modes: mentorship and insights from The Incubation Network's industry experts, modular on-demand learning, and personalized lessons where entrepreneurs can focus on topics aligned with their solutions.

Co-developed with Sagana, the program was supported by the Alliance to End Plastic Waste, Global Alliance Canada, and Lucy Ana Walton via The Denver Foundation.



Network-Exclusive Resources

The Incubation Network published several network-exclusive resources on a community portal, designed to promote capacity-building for a network of entrepreneurs and innovators.

The resources include:

- 'Gender Impact for Entrepreneurs': a series of learning modules developed with Value for Women and guides for ESOs to develop startup support programs.
- 'Program Support': 12 articles that provide tools and guides specifically aimed at ecosystem builders to develop support programs.
- 'Plastics & Circularity': 10 curated reports, case studies, and guides to help better understand plastics and circularity in the regional context of South and Southeast Asia.
- 'Startup & Growing Business Support': 23 frameworks curated to help founders grow their teams.





An overview of The Incubation Network's key activities in 2021:

Regional Inclusive Markets Programs



Saahas Zero Waste is an environmental enterprise with over 20 years of experience in waste management, resource recovery and social impact. Photo courtesy of Saahas Zero Waste

Leakage and Livelihoods Program

Launched in August 2021, the Leakage and Livelihoods Program supports organizations to explore different models of engaging informal waste communities and driving change to create inclusive waste systems. Seven organizations from across India, Indonesia, and Vietnam were funded to test their solutions for six to twelve months, with the goal of improving material recovery processes and reducing ocean plastic leakage, while also improving livelihoods and social protection for informal waste workers.

Each organization received financial support, expert advice and insights to test their solutions and measure impact.

SHOWCASE

ReForm Plastic

ReForm Plastic (an initiative of Evergreen Labs) operates a franchised model of facilities across Southeast Asia that processes low-value plastics into construction materials and other products through compression-molding solutions.

They piloted a community Material Recovery Facility (MRF) model in central Vietnam that offers voluntary source separation options for households and businesses, and an integrated, flexible, and inclusive arrangement for informal waste workers.

Through the Leakage and Livelihoods program:

- ReForm Plastic received funding of US\$ 25,000 from The Incubation Network to establish four mini-MRFs managed by female informal waste workers in Hoi An, Vietnam. They established partnerships with municipal government bodies and the local Women's Union to facilitate operations which allow the informal waste workers to retain the high-value plastics for trading, ReForm to collect the low-value plastics for their manufacturing, and the municipality to collect the remainder.
- ReForm Plastic also established a pilot program for collection of plastic across public schools in Hoi An and continues to advocate for city-wide adoption.



As part of their homegrown Wala Usik ("do not waste anything") movement, the Philippine Reef & Rainforest Conservation Foundation, Inc (PRRCFI) team will be conducting a project to address gender and human rights issues for women informal waste workers. Photo courtesy of PRRCFI

Equality in Plastics Circularity Program

A new gender-focused program, Equality in Plastics Circularity, was launched in November 2021 with a cohort of eight organizations. The program will support innovative pilot solutions and research to tackle social and economic gender inequalities across the plastic waste value chain.

Specifically, the program will support practical solutions to empower women waste workers and support civil society and private sector actors to advocate for local policy change to push for stronger gender equity in waste management and recycling systems. Grant funding of approximately US\$ 200,000 was deployed to participating organizations to pilot their solutions and seek technical assistance.



Ecosattva Environmental Solutions' project seeks to provide services that reduce leakage and also create income-generating and otherwise empowering pathways for women. Photo courtesy of Ecosattva Environmental Solutions

SHOWCASE

EcoSattva Environmental Solutions

EcoSattva Environmental Solutions is a women-led social enterprise based in Aurangabad, Maharashtra, India that provides services in solid waste management, green cover management, and waste water management.

Through the Equality in Plastics Circularity program:

- EcoSattva received funding of US\$ 30,000 and technical assistance to pilot a women-run waste collection business. They are working with village councils in Aurangabad to establish dry waste collection services and public awareness campaigns to introduce household segregation of waste.
- Two female informal waste workers (Renuka Raykar and Soni Kharat) are receiving formal training in financial and business management, communication skills, and stakeholder relationship building, to empower them to take ownership in their community. They have also been enrolled in a driving school to enable them to become the first women in the area to operate their own commercial waste collection vehicles.
- The business acquired village council clients by partnering with local companies' corporate social responsibility campaigns, reducing the initial cost burden to villages.
- The Incubation Network engaged Nari Samata Manch, a Pune-based gender equality organisation, to facilitate gender sensitivity training for the EcoSattva team, and tackle previously invisible gendered barriers.



An overview of The Incubation Network's key activities in 2021: In-country Programs



The Waste Action Network was established by the Ocean Plastic Prevention Accelerator to facilitate connections and increase collaboration between plastic waste management stakeholders in Indonesia. Photo courtesy of The Incubation Network

Indonesia

Ocean Plastic Prevention Accelerator

Established in 2020, the Ocean Plastic Prevention Accelerator (OPPA) is an Indonesia-based social innovation ecosystem builder under The Incubation Network, with a mission to address ocean plastic leakage.

Community engagement was initiated in January 2021 with an open call to join the second cohort of the Waste Community Accelerator, a program that focuses on capacity building for businesses and small and medium-sized organizations that handle plastic waste and recycling/upcycling innovations in East Java. In July 2021, the program concluded with a showcase of six waste enterprises that will continue to receive support via OPPA's Waste Systems Change Community group.

In March 2021, OPPA launched the Informal Plastic Collection Innovation Challenge in partnership with the World Economic Forum, UpLink, and the Indonesia National Plastic Action Partnership. The challenge received 78 submissions from 24 countries, to form a cohort of 12 participating entrepreneurs. The cohort was provided with three months of training, mentorship, and partnership building to scale their solutions to improve the informal waste sector in Indonesia. Upon close of the program, the cohort had established 11 partnerships with local companies, corporates, and other organizations.

SHOWCASE

Robries

Robries creates furniture and interior products from plastic waste sourced from waste banks and communities. After four years of operation, they have successfully established their markets in several cities across Indonesia and have started to export their products.

Through the Waste Community Accelerator program:

- Robries was able to build better connections with plastic feedstock providers such as Surabaya Central Waste Bank and other organizations operating with networks of smaller waste banks. These relationships helped to meet their sourcing needs, enabling them to scale-up operations.
- The leadership team was introduced to the founder and CEO of Waste4Change, who became their mentor.
- Robries was selected as one of the participants for a subsequent program run by The Incubation Network, securing an additional US\$ 45,000 grant of seed funding.
- Robries established valuable networks and gained business knowledge that supported their efforts to scale production, resulting in a fourfold increase in business.



Thailand

Thailand Plastics Circularity Accelerator

The second in-country program in Thailand was launched in September 2021 in partnership with the Alliance to End Plastic Waste and the ECCA Family Foundation.

Custom-designed for growing the local circular economy, the program aims to scale Thailand-based plastic recycling businesses and foreign companies prepared to enter the local market. This inclusive and sustainable approach is designed to be a catalyst for developing Thailand's end market for low value plastics. To date, four ventures have been selected from 29 applications to receive support and mentorship in 2022.

The Incubation Network team visited CIRAC in May 2022, where they connected with Wat Chak Daeng to learn more about the partnership. Photo courtesy of CIRAC

SHOWCASE

CIRAC

CIRAC turns aluminum laminated thermoplastic, such as snack and food packaging, into valuable products and materials, such as aluminum, diesel fuel, and activated carbon. According to CIRAC, their process not only cuts aluminum production cost to a third of conventional mining, but also saves on the cost and environmental impacts of landfill, incineration, and extraction activities.

Through the Thailand Plastics Circularity Accelerator program:

- CIRAC is exploring a partnership with a temple known for its recycling initiatives (Wat Chak Daeng) to process their plastic and food packaging waste into high-value raw materials. By the second quarter of 2023, CIRAC will build a machine that will operate out of the temple to process low-value, hard to recycle plastic waste into valuable resources, such as aluminum and activated carbon.
- CIRAC is also seeking to increase their connections and pursue partnerships that can aid their business expansion to implement their technology in other areas across Thailand.
 Through their mentorship journey, they are also looking to improve their business operations.



INSIGHTS by THE CIRCULATE INITIATIVE

Our research and insights agenda is designed to leverage our own expertise and our network of partners to identify gaps in addressing the plastic pollution problem and support stakeholders to make better decisions about engaging in the sector.

Key activities undertaken throughout 2021



PLACES

Plastic Lifecycle Assessment Calculator for the Environment and Society

Plastic Lifecycle Assessment Calculator for the Environment and Society

The first tool of its kind in Asia, the Plastic Lifecycle Assessment Calculator for the Environment and Society (PLACES) is an open-access calculator that measures reductions in greenhouse gas (GHG) emissions, energy, and water from plastic recycling.

Developed in partnership with Circulate Capital and Singapore's Agency for Science, Technology and Research (A-STAR), PLACES enables users to track country-specific environmental impacts of plastic waste management. The tool currently tracks data in India and Indonesia, two markets with significant plastic waste leakage and developing waste management infrastructure.

With PLACES, investors, entrepreneurs, city planners, and policymakers can now access reliable, market-specific data to measure the environmental benefits of investments and recycling interventions, empowering their decisions about solutions to the plastic waste and climate change crises.

Closing the Data Gap Challenge

Help us identify high-impact studies to fill critical gaps in knowledge that prevent action and progress in the fight against plastic pollution.





Closing the Data Gap Challenge

The Closing the Data Gap Challenge was launched in September 2021 in collaboration with the Alliance to End Plastic Waste.

The challenge aims to identify and support high-impact studies in India, Malaysia, and the Philippines to fill the critical knowledge gaps that prevent action in the fight against plastic pollution.

With a shared goal of providing better quality data to decision makers and other key stakeholders, the challenge will aid understanding of the cause and effect of plastic waste in different geographies while uncovering effective interventions, investable opportunities, and best practices.

The advisory committee for the selection of research partners included representatives from the Alliance to End Plastic Waste, the University of Leeds, IBM, and The Circulate Initiative.

Thought Leadership

The Circulate Initiative's research team authored several thought pieces on a range of topics related to plastic waste.

Highlights from 2021







Extended Producer Responsibility: Rebuilding a more circular plastic value chain

Extended Producer Responsibility – or EPR for short – is one of the ways policymakers can explore to improve plastic waste management.





The Link Between Plastic Pollution and Climate Change

Climate change and plastic pollution are undoubtedly two of the most pressing environmental crises we face globally today.

A Sea of Plastics Claims and Credits: Steering Stakeholders Towards Impact

As more companies and governments make commitments to address plastic pollution, a number of plastic offset claims and credit schemes have emerged. This paper covers the current landscape of standards, certifications and credit programs to assess the strengths and weaknesses of current programs and whether they are equipped to help buyers meet their impact objectives.

Extended Producer Responsibility: Rebuilding a More Circular Plastic Value Chain

This blog highlights the Knowledge Bank's collection of resources and tools around Extended Producer Responsibility (EPR). It posits the need for collaboration and action between all stakeholders and that EPR be integrated into the broader agendas of governments and corporations in order to effect change at scale.

The Link Between Plastic Pollution and Climate Change

This blog focuses on the link between the plastic pollution and climate change crises, drawing on research which provides a starting point in understanding the connection further.

Impact Metrics Working Group

The Circulate Initiative brought together a diverse group of leading subject matter experts to form the Impact Metrics Working Group (IMWG) in 2020. The group was formed to better understand the impact of solutions to address plastic leakage and to identify and address key gaps in data, metrics, and methodology. Members of IMWG include the world's foremost experts on waste management and ocean health, investors, nonprofits, researchers, and advocacy organizations.

Building on the momentum of 2020 when The Circulate Initiative developed its first research agenda with valuable inputs and feedback from the IMWG, the group had two virtual convenings in April and September 2021. During the convenings, each member was invited to share updates from their organizations, including new research and outreach activities.

The IMWG also exchanged ideas and shared insights on the following industry topics:

- Women's empowerment in plastic waste management
- Pricing transparency in the plastics recycling value chain
- Improving livelihoods and responsible sourcing
- Climate and plastics



Strategic Partnerships

Urban Ocean

In partnership with Ocean Conservancy, Resilient Cities Network, and the University of Georgia

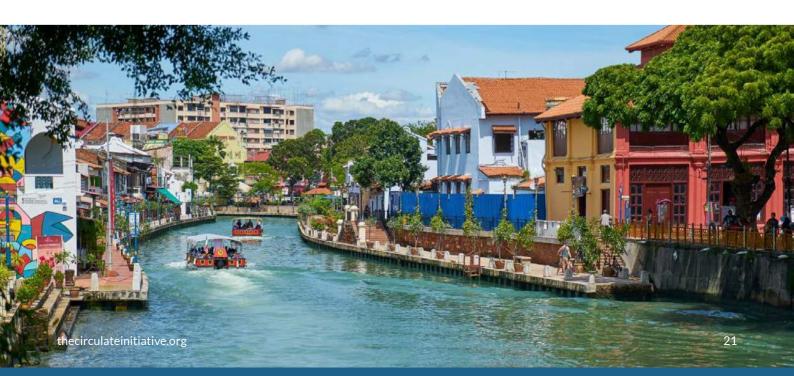
Launched in 2020, Urban Ocean is a capacity-building and accelerator program for cities to champion circular economy principles, build awareness of ocean plastic pollution, and assess waste management systems. The program supports cities to develop strategies and projects designed to address the interrelated challenges of ocean plastics and community resilience. Urban Ocean works with five cities in South and Southeast Asia and Latin America, offering opportunities to develop and deliver solutions where the action is most needed – at the local level.

In August 2021, Urban Ocean released the <u>Circularity</u> <u>Assessment Protocol (CAP) reports</u> based on findings from the program's first cohort of cities: Can Tho, Vietnam; Melaka, Malaysia; Panama City, Panama; Pune, India; and Semarang, Indonesia.

URBAN OCEAN Conducted with local implementation partners in each city and guided by the Circularity Informatics Lab at the University of Georgia, each CAP report is a standardized rapid assessment based on community-level data on plastic usage and management.

Designed to inform decision-makers, the CAP results provide baseline data for the Resilient Cities Network's Opportunity Assessment Tool. This comprehensive gap assessment tool allows participating cities to map challenges, risks, and vulnerabilities within their critical waste management systems.

In September 2021, the Ocean Conservancy released a toolkit on behalf of Urban Ocean to support cities to tackle the plastic pollution challenge, addressing a comprehensive range of topics from policies to local community engagement. The toolkit provides municipalities with a "one-stop shop" resource to get started on the way to address plastic pollution within their communities.



Strategic Partnerships (continued)



Delterra

Delterra, an environmental nonprofit, and The Circulate Initiative released a research report in December 2021 titled, Making 'Cents' of Recycling Behavior: The Return on Investment of Spreading the Recycling Habit. The report draws on Delterra's firsthand experience delivering recycling services in communities in select emerging markets. The analysis explores the business case for investing in behavior change to boost recycling rates, demonstrating the cost effectiveness and payback periods of interventions.

The report delivered the following key insights:

- Promoting recycling behavior can pay back quickly, especially when prices reflect environmental impacts.
- Behavior change can cost less than technology-based alternatives for boosting recycling outcomes.
- Deeper investment in community engagement is likely needed to reach high recycling rates.

This report is the first in a series that will explore the opportunities of recycling behavior change to positively reshape the circular economy.



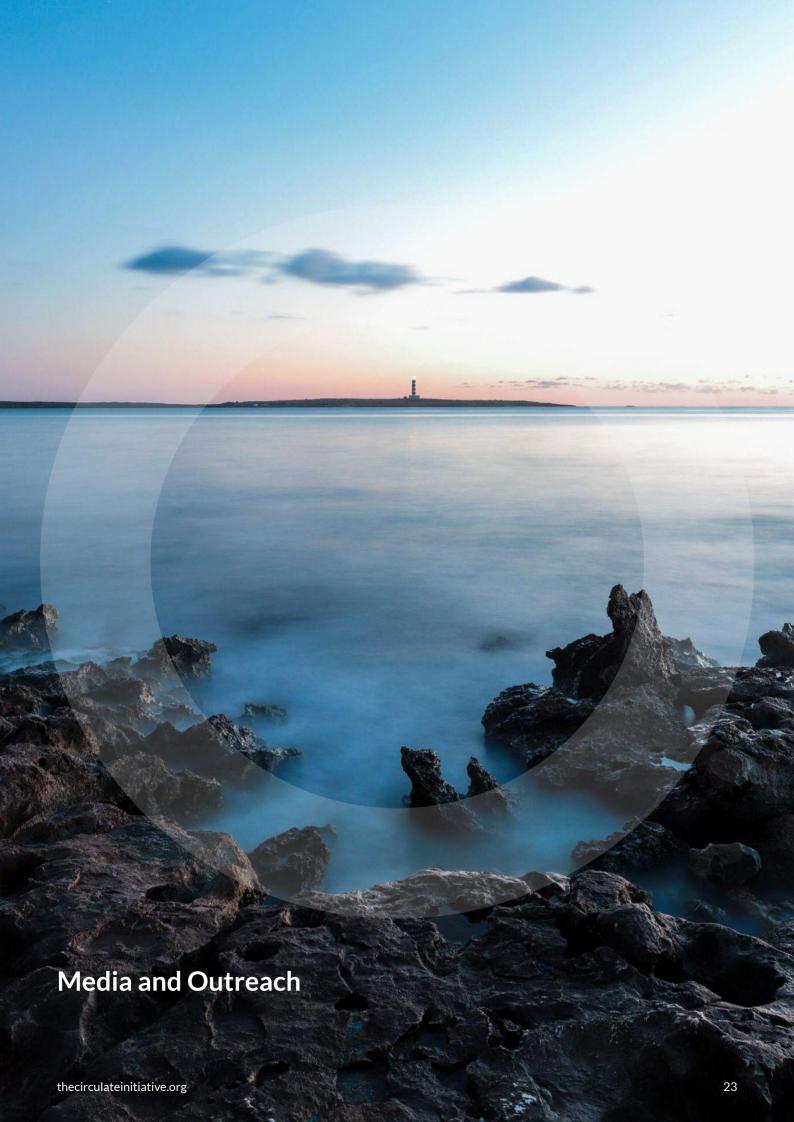
World Economic Forum Global Plastic Action Partnership

The Global Plastic Action Partnership (GPAP) is a multi-stakeholder platform dedicated to translating commitments to reduce plastic pollution and waste into concrete action. GPAP is focused on designing and supporting strategic tools and resources to facilitate investment in the circular economy for plastics.

In 2021, Ellen Martin, Director of Impact and Insights at The Circulate Initiative joined GPAP as co-chair of its financing taskforce and led research on the role of policy in driving private investment into plastics circularity.







Media and Outreach

Media Coverage Highlights



Fostering the Plastic Credit Ecosystem: A Deep Dive into The Circulate Initiative's 11 Best Practices

rePurpose

READ STORY



On climate action, private investors urge governments to jump in (the water is warming)



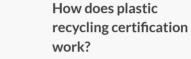
READ STORY



Indonesia wants to reach net-zero plastic pollution by 2040. Do you have a big idea to help them do it?



READ STORY









Beyond Waste: The Results are In for Urban Ocean's First Batch of City Plastics Studies



READ STORY



Circulate Capital breaks down Southeast Asia's plastic problem



READ STORY



Sustainable Singapore: Rhianne Lovell-Boland speaks to Simon Baldwin, The Incubation Network



LISTEN NOW

Forbes

Your Plastic Waste Is Heating Up The Planet: A New Tool Helps Investors Calculate Climate Impact Of Recycling



READ STORY

Full List of Media Coverage

Industry Platform/Newsletter

- Back to Blue Whitepaper, January March,
 Plastics Management Index Evaluating effective
 management and sustainable use of plastics
- rePurpose blog, 24 March, <u>Fostering the Plastic</u>
 <u>Credit Ecosystem: A Deep Dive into The Circulate</u>
 <u>Initiative's 11 Best Practices</u>
- World Economic Forum article, 26 March,
 Indonesia wants to reach net-zero plastic pollution
 by 2040. Do you have a big idea to help them do it?
- Wilson Center InsightOut series, April, What Indonesia's Pioneering Work on Ocean Plastic Can Teach the Rest of the World
- Lux Research article, 17 May, Why Recycling Credits Are A Better Solution Than Mass Balance Approaches
- Global Plastic Action Partnership blog, 17 June, <u>Twelve ground-breaking innovators tackling</u> informal plastic collection in Indonesia
- World Economic Forum article, 28 June, <u>12</u> innovators improving the lives of Indonesia's informal sector workers
- Ocean Conservancy blog, 9 September, <u>Beyond</u>
 Waste: The Results are In for Urban Ocean's First
 Batch of City Plastics Studies
- Building & Investment article, September -October, The Circulate Initiative launches open-sourced plastic waste climate impact calculator

Radio

 Money 89.3FM Sustainable Singapore, 14 July, <u>Tackling plastic waste and circularity challenges in</u> Southeast Asia

Online

- Eco-Business podcast and article, 10 March, <u>How</u> does plastic recycling certification work?
- Eco-Business, 21 June, <u>Ventures to receive Growth</u>
 <u>Support from The Incubation Network to tackle</u>
 flexible plastic waste
- Investor Indonesia, 21 June, 12 Selected Waste <u>Management Innovators Participate in the Next</u> Round of the IPCIC Event
- ImpactAlpha, 21 September, On climate action, private investors urge governments to jump in (the water is warming)
- The Edge Singapore, 29 September, <u>Circulate</u>
 <u>Capital breaks down Southeast Asia's plastic</u>
 <u>problem</u>
- Matichon (Thailand), 29 September, <u>The Incubation</u>
 Network launches three partnerships in Thailand
 to help Thai startups end ocean plastic pollution
- Prachachat Turakij (Thailand), 4 October, <u>68</u> million baht injected for startups to end ocean plastic pollution
- Forbes, 21 October, <u>Your Plastic Waste Is Heating</u>
 <u>Up The Planet: A New Tool Helps Investors</u>
 <u>Calculate Climate Impact Of Recycling</u>
- Eco-Business, 14 November, Closing the Data Gap Challenge

Events and Speaking Engagements

In 2021, The Circulate Initiative leveraged a range of industry platforms to ensure our learnings are always a part of the wider conversations taking place. Below is a selection of the discussions that the team lent their voices to over the year.

Financing Sustainability and the Circular Economy

In March, Ellen Martin joined a panel at the Circular Economy Leadership & Partnership Summit (CELP) in Bangkok to discuss the financing gap, and what is needed to fund sustainable solutions to the plastic waste crisis. Hosted by the Office of National Higher Education Science Research and Innovation Policy Council and the United Nations Environmental Program (UNEP) Asia and the Pacific Office, the event provided a platform for industry leaders, researchers, and policymakers to share their solutions to accelerating the circular economy transformation.

Advancing the Conversation on Plastics Credits

In June, Ellen Martin attended Circularity 21, held virtually due to COVID-19, where she joined a panel to discuss the benefits and limitations of plastic credits, and what it will take to scale, track, and standardize a market for them. Ellen also participated as a judge for Accelerate at Circularity 21, a fast-pitch competition featuring entrepreneurs with innovative technologies, products, and services advancing a circular economy.

Impact Investment Opportunities along the Water Chain

Khunapong Khunaraksa, The Circulate Initiative's Director of Operations and Strategy, attended the South China Morning Post's Asia Sustainability Conference in August. Themed around Accelerating a Green Recovery in Asia, Khunapong participated as a subject matter expert and panel member to explore whether Asia is heading towards a water crisis, what needs to be done to develop safe, sustainable, and accessible water in the region and where the opportunities are for impact investors along the water chain.

Accelerating Circular and Resilient Cities

In November, Ellen Martin attended the Philanthropy Asia Summit in Singapore, a collaborative platform to convene and connect global and regional philanthropists to catalyze partnerships. Speaking on a panel to discuss how cities can accelerate the transition to a circular economy, the event was an opportunity to connect with multi-sector stakeholders and design calls to action to collectively address societal challenges and achieve greater impact.

The Plastics Management Index

Ellen Martin and Laura Benns, The Incubation Network's Program Director, participated in two stakeholder workshops organized by The Economist Impact. The events were aimed at discussing the results of the Plastics Management Index published by Back to Blue, an initiative by The Economist Impact and the Nippon Foundation.



Organizational Developments

To advance The Circulate Initiative's growth and support our strategic initiatives, we expanded our Board and our team. We are proud to have a diverse group of team members across Asia-Pacific and the United States, over 50% of whom are women. We will continue to grow our team in 2022 in line with our strategic objectives.

New Team Members



Khunapong Khunaraksa Director of Operations and Strategy



Umesh Madhavan Research Director



Shamina Mohamed Communications Manager



Juline Lew Research Analyst



Nurul Aisyah Suwandi Research Analyst



The Circulate Initiative team in Singapore, April 2022.

From left to right: Nurul Aisyah Suwandi, Juline Lew, Khunapong Khunaraksa, Michael Sadowski, Umesh Madhavan, Ellen Martin, and Shamina Mohamed

New Board Members



Jeep Kline
Partner of MrPink VC, an impact
venture fund targeting South
American entrepreneurs



Ariel MullerManaging Director, Asia at
Forum for the Future



Outlook for 2022

Outlook for 2022

Incubation

The Incubation Network will build on the significant progress made with its partners to accelerate the support of innovators, communities, and cities tackling the plastic waste crisis in emerging markets.

Specifically, The Incubation Network's projects will respond to market-specific needs as follows:

- Evaluate promising solutions and embed them into local waste systems through customized support, such as <u>PlastX</u> in Thailand, and regional venture-building programs, such as TIN SCALE 100(t).
- Collaborate with a wide range of key local stakeholders to implement on-the-ground initiatives to improve the livelihoods of vulnerable groups in waste management and recycling systems.
- Embed a portfolio of solutions and ventures into local markets and existing waste systems and match them with targeted partnerships such as <u>The Single-Use Plastics Challenge</u>.
- Support SMEs in Thailand and Indonesia, focusing on those who are already operating in local waste management and recycling systems.

 SMEs will receive support through multiple programs, such as the Thailand Waste
 Management and Recycling Academy program
 with Seedstars, the Thailand SME 'Scale Up Program' for Plastics Circularity, and the Ocean Plastic Prevention Accelerator's Waste
 Community Accelerator and Waste System Community program.



Insights

The Circulate Initiative will continue to build out our insights portfolio, leading studies on a range of areas including material flows, plastics and climate, livelihoods, and behavior change.

To address specific gaps, The Circulate Initiative will focus on the following key projects:

- PLACES 2.0: The second edition of the environmental impact tool, PLACES, will cover a wider geographical reach to include Malaysia, Thailand, the Philippines, and Vietnam. Enhanced features will enable users to quantify the climate impacts of diverting a greater range of plastic waste from various end-of-life states.
- Responsible Sourcing: Collaborating with stakeholders and experts across the plastics recycling value chain, this study will address the policies and practices that should be implemented in emerging markets with a view on fair remuneration, ethical labor, and human rights. The results will provide practical guidance to key stakeholders involved in the trade of recycled plastics.
- Pricing and the Recycled Plastics Value Chain:
 Exploring the cost drivers, potential margins, and pricing structure of post-consumer recycled plastics value chains, this research will aim to provide a better understanding of recycled materials pricing to identify technological, economic, and policy solutions that can help to unlock choke points and improve cost efficiency.

- Plastic Waste Mapping in India and Southeast
 Asia: This analysis will investigate national-level
 recycled plastic material flows, supply and
 demand, and policies to identify key waste-sheds
 in India, Indonesia, Thailand, and Vietnam.
 Covering collection, preparation and recycling
 infrastructure, and economics, the study will
 identify opportunities for plastic circularity and
 the interventions needed for implementation at a
 waste-shed level.
- Regional Corporate Engagement and Activation:
 This study will seek to identify the challenges that South and Southeast Asian companies across target sectors face in participating in the shift to circular plastics. The results will identify the levers that can be employed to encourage companies in the region to play a more active role in tackling the plastics pollution challenge.
- Plastics Circularity Investments Deal Tracker:
 By consolidating, analyzing, and reporting on investments, deals, trends, and case studies, this tracker will help support the case for investment of private capital into plastic circularity, closing the knowledge gap on the size of the opportunity.





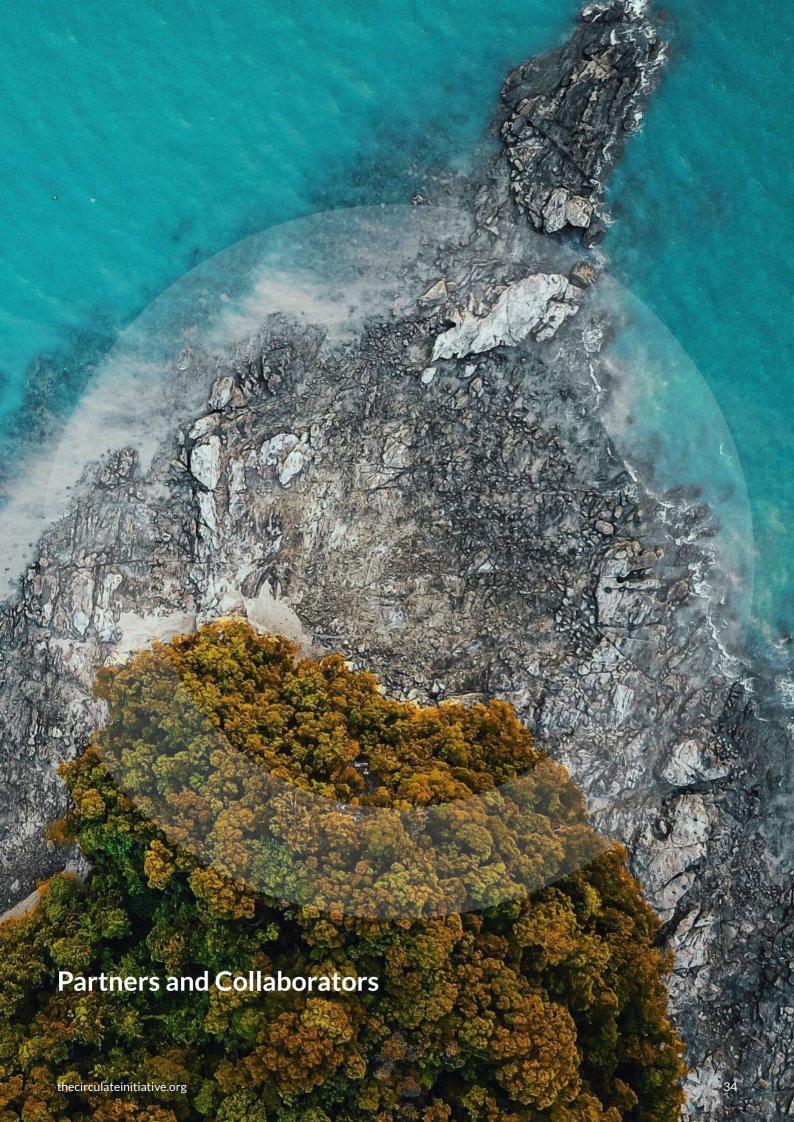
Audited Financial Summary

Circulate Initiative Inc. Statement of Functional Expenses

For the year ended December 31, 2021

	Program Services				Supporting Services		Total		
	Amplification	Incubation Network	Monitoring and Evaluation	Other Related Programs	Total Program Services	Management and General	Fundraising	2021	2020
Personnel costs:									
Salaries and wages	\$38,420	\$15,827	\$12,628	\$166	\$67,041	\$67,067	\$6,595	\$140,703	\$220,009
Fringe benefits	\$65	\$45	\$31		\$141	\$1,045	\$23	\$1,209	\$20,787
Payroll taxes	\$1,328	\$754	\$553		\$2,635	\$19,103	\$377	\$22,115	\$15,876
Total personnel costs	\$39,813	\$16,626	\$13,212	\$166	\$69,817	\$87,215	\$6,995	\$164,027	\$256,672
Consulting	\$4,014	\$2,740,607	\$102,072	-	\$2,846,693	\$145,204	\$994	\$2,992,891	\$2,991,682
Grants to others	\$175,000	-	\$200,000	-	\$375,000	-	-	\$375,000	\$332,063
Professional fees	-	-	-	\$6,775	\$6,775	\$173,700	-	\$180,475	\$204,294
Marketing and advertising	\$107,268	-	\$17,781	-	\$125,049	\$10,401	\$1,500	\$136,950	\$997
Program contractors	\$24,651	\$27,237	-	-	\$51,888	\$9,600	\$2,400	\$63,888	\$101,378
Travel, meals and entertainment	-	-	-	-	-	\$22,288	-	\$22,288	\$91,999
Insurance	-	-	-	-	-	\$8,988	-	\$8,988	\$7,010
Dues and subscriptions	-	-	-	-	-	\$2,975	\$1,803	\$4,778	\$147
Information technology	-	-	-	-	-	\$3,469	-	\$3,469	\$8,620
Occupancy	-	-	-	-	-	\$3,206	-	\$3,206	\$4,423
Office expenses	-	-	\$85	-	\$85	\$2,078	-	\$2,163	\$661
Total expenses before depreciation	\$350,746	\$2,784,470	\$333,150	\$6,941	\$3,475,307	\$469,124	\$13,692	\$3,958,123	\$3,999,946
Depreciation		-	-	-	-	-	-	-	\$778
Total expenses	\$350,746	\$2,784,470	\$333,150	\$6,941	\$3,475,307	\$469,124	\$13,692	\$3,958,123	\$4,000,724





Partners and Collaborators

The Circulate Initiative is supported by many collaborators and partners from across the globe. We would like to recognize and thank the following organizations and individuals for their ongoing commitment and support as we work to solve the plastic pollution challenge.

Alliance to End Plastic Waste

Alliance to End Plastic Waste is a key supporter of The Circulate Initiative and its growth strategy. In 2021, Alliance to End Plastic Waste collaborated with The Circulate Initiative and The Incubation Network on several projects including venture support in Thailand and Indonesia, ecosystem development in Vietnam, and the Closing the Data Gap Challenge.

We look forward to strengthening our partnership in 2022.

Impact Metrics Working Group

- Adam Wolfensohn, Encourage Capital
- Alix Grabowski, WWF
- Chever Voltmer, Ocean Conservancy
- Courtney Thompson, Morgan Stanley
- Cynthia Shih, Delterra
- Deborah B. Robertson, Asian Development Bank
- François Henri Derrien, Danone
- Ellie Moss, Moss & Mollusk
- **Erin Murphy**, Arizona State University
- Grant Collins, Circulate Capital
- James G Baker, Asian Development Bank

- Jenna R Jambeck,
 University of Georgia
- Joao Sousa, International Union for Conservation of Nature
- Karin Merle
- Keri Browder, Ocean Conservancy
- Maeve Nightingale, International Union for Conservation of Nature
- Sabine Strnad, Alliance to End Plastic Waste
- **Set Oya**, TetraTech for Clean Cities, Blue Ocean
- Sonia Dias, WIEGO
- Stuart Gill, SecondMuse
- Taylor Cass Talbott, WIEGO

Our Partners and Supporters



























Our Collaborators























References

References for data points listed on page 8 of this report:

Circulate Capital (2020), The Intersection of Climate Investing and Circular Plastics in South and Southeast Asia, Available from:

https://www.circulatecapital.com/ files/ugd/77554d _2b894a872ea04170884665aa730f1762.pdf

Economic Research Institute for ASEAN and East Asia (ERIA) (2018), Industry 4.0: Empowering ASEAN for the Circular Economy, Available from:

https://www.eria.org/research/industry-40-empowering-asean-for-the-circular-economy/

Lebreton, L., van der Zwet, J., Damsteeg, JW. et al. (2017) River plastic emissions to the world's oceans. *Nature Communications*, Volume 8, Available from: https://www.nature.com/articles/ncomms15611

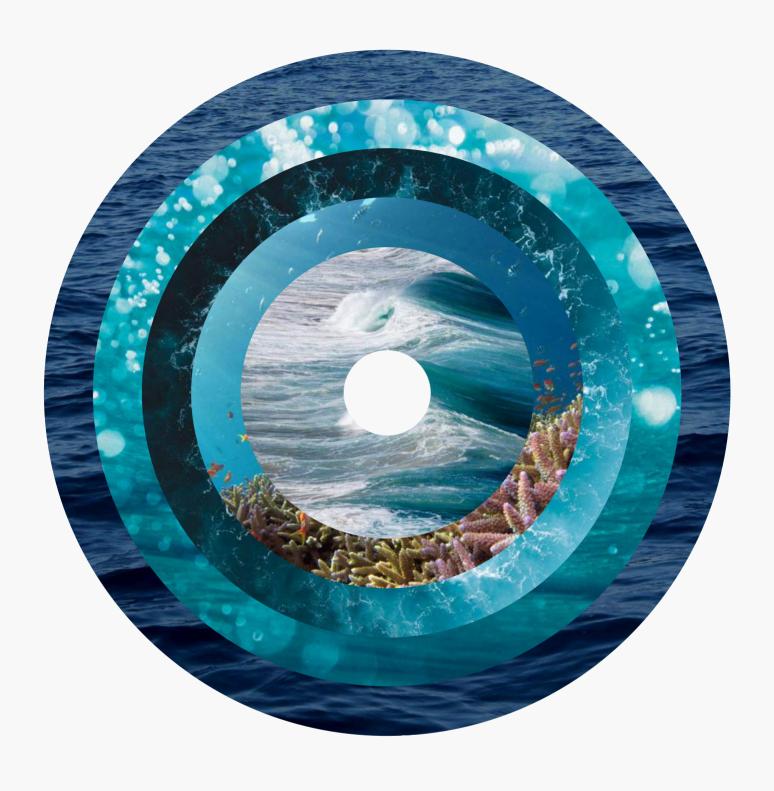
Johansen, Despina F. & Vestvik, Rolf A. (2020), The cost of saving our ocean - estimating the funding gap of sustainable development goal 14, *Marine Policy*, Volume 112, Available from:

https://www.sciencedirect.com/science/article/abs/pii/S0308597X19305111?via%3Dihub

The Pew Charitable Trusts & SYSTEMIQ (2016), Breaking the Plastic Wave: A Comprehensive Assessment of Pathways Towards Stopping Ocean Plastic Pollution, Available from:

https://www.systemiq.earth/wp-content/uploads/20 20/07/BreakingThePlasticWave MainReport.pdf





2021 Annual Report

