GLOBAL
PLASTIC ACTION
PARTNERSHIP

Unlocking the Plastics Circular Economy:
A Toolkit for Investment

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Contents

globalplasticaction.org

@PlasticImpact

plasticaction@weforum.org

Executive summary

It is estimated that, without significant action, 29 million tonnes of plastics will flow into the ocean every year by 2040. There are known solutions to this potential disaster, yet the transition to a circular economy will require investment of $1.2 trillion, in addition to a significant shift away from business-as-usual, to reach the scale of infrastructure needed.[1] Nevertheless, we know that investment in the downstream segment of the value chain is only one piece of the solution to end plastic waste.

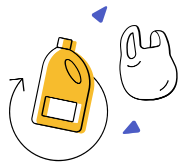
While both the private and public sectors are mobilizing to address the challenge of plastic waste, significantly more action is needed to match the scale of the problem. Voluntary corporate action, supportive policy frameworks and relevant finance mechanisms are all enabling greater private investment in tackling plastic waste and developing the circular economy — one which promotes the elimination of waste and the continual safe use of natural resources. Financial institutions should take note: the opportunities are increasingly coming into view.

About the toolkit

This work supports the Global Plastic Action Partnership's (GPAP) workstream on *unlocking financing*. GPAP designs and supports strategic tools and resources that facilitate investment in a circular economy for plastics. It aims to identify barriers to investment and to highlight emerging opportunities, while delivering solutions in partnership with global and local stakeholders.

Initially focusing on *downstream* investments in plastics waste management and recycling, this series of case studies demonstrates how capital from a variety of sources is ensuring plastic waste is recovered and recycled. Included in this portfolio are mature examples, such as rPET infrastructure in Mexico which benefited from multiple rounds of financing, as well as high-potential analogous examples, such as the SUNREF program scaling renewable energy in Nigeria.

Policy plays a critical role in enabling the flow of private capital in this domain. As each of the cases here illustrates, policy stimulates investor interest by supporting a cohesive system for plastics circularity, incentivizing investment and reducing risk.



29M

29 million tonnes of plastics will flow into the ocean every year by 2040 without significant action.

$1.2T

The transition to a circular economy will require investment of $1.2 trillion to reach the scale of infrastructure needed by 2040.

How investment happens: three key learnings

1

In anticipation of policies and regulation, brands and strategic investors in the plastics value chain play an important role in boosting demand and supporting a more circular economy for plastics.

As the Government of Mexico mulled legislation to improve the country's management of solid waste, **Coca-Cola FEMSA**, in collaboration with bottling and plastics industry peers, supported the establishment of ECOCE (Ecología y Compromiso Empresarial or Businesses Committed to Environmentalism), a non-profit dedicated to improving recycling rates in Mexico. Using price incentives to encourage greater PET bottle collection, the consequent increase in recycling rates and reliability of local rPET (recycled PET) feedstocks helped mobilize capital to develop local recycling infrastructure. Early on, this capital was sourced from the **International Finance Corporation** (IFC), a private sector-focused global development institution, and other commercial-return seeking institutions. Subsequent capital came from recycled plastic stakeholders in Mexico, including, most recently, through investment by Coca-Cola FEMSA that was funded by the tightly priced issuance of a green bond for which **Morgan Stanley** acted as joint bookrunner. The aggregated capital helped create a domestic PET-processing sector, broadened the number of market participants engaged in tackling plastic waste and increased the quantity of recycled material in plastic packaging in Mexico.

Read more about case study 1 here

With strong demand from its global customer base and a drive to advance its own environmental, social and corporate governance (ESG) credentials, **Indorama Ventures Ltd.** (IVL), the world's largest producer of PET bottles, committed to double its recycling capacity by investing $1.5bn in processing facilities across five strategic emerging markets. To achieve this, IVL secured a blue loan financing package valued at $300m from three development finance institutions (DFIs): the **International Finance Corporation** (IFC), **Asian Development Bank** (ADB) and **Deutsche Investitions- und Entwicklungsgesellschaft** (DEG). The new financing generated further investments in recycling infrastructure by IVL. This innovative financial instrument is the world's first independently verified, non-sovereign blue loan and has extended the development and acceptance of issuance guidelines for the nascent blue bond market.

Read more about case study 2 here

There have already been several notable transactions financed by DFIs, corporates and impact investors that are transparent, show clear benefits and are boosting the circularity of the plastics value chain. While many examples aim to increase the supply and use of rPET[2], they still serve as a model for how financing can scale similar solutions for other common forms of plastic waste.

2

Governments are mobilizing private capital through thematic bond issuances and loans that enable investment in plastics circularity.

Government financing plays a critical role in scaling up plastic waste solutions. By investing in waste management infrastructure, national governments signal to the market that they recognize the extent of the plastics problem. Government finances are often stretched across multiple priorities, particularly in emerging markets. Therefore, innovative approaches to raising funds in debt capital markets are essential. The Government of **Indonesia** is leading the way in this arena. Regular issuances of climate- and SDG-related debt instruments, both internationally and domestically, are developing and deepening the market for such instruments. Examples include green sukuk (bond structures compliant with Sharia, or Islamic religious law), green bonds and SDG bonds in Indonesia and beyond.

Read more about case study 3 here

In emerging markets, private investors are often deterred by political and institutional risks. Innovative financing approaches, supported by DFIs, have allowed the **Government of Belize** to tackle its key environmental objectives. The government has restructured existing sovereign debt, and, as a result, is working to conserve its vital marine environment.

To achieve this, **Credit Suisse** structured and arranged a blue bond for **The Nature Conservancy's** (TNC) Blue Bond for Conservation program in Belize. The **U.S. International Development Finance Corporation (DFC)** played a crucial role in support of the transaction, and this innovative multi-stakeholder approach supported Belize to nearly double its marine protected area and establish a conservation fund with an aim to secure the long-term protection of its marine ecosystem. This novel initiative could pave the way for the financing of plastic waste solutions and other environmental or social development priorities in emerging markets.

Read more about case study 4 here

These types of government-led transactions help develop circular economy-focused financial instruments and expand the pool of potential market participants by both raising awareness of thematic investments and demonstrating their success. As policy and capital commitments are increasingly tied to broader sustainability and climate goals, action on plastics and circular infrastructure may see considerably more investment in the near term.

3

Attracting investment to support a plastics transition from linear to circular could benefit from learnings across other industry transformations, notably renewables in the energy sector.

The Sustainable Use of Natural Resources and Energy Finance (SUNREF) initiative created by the **Agence Française de Développement** (AFD) and implemented in Nigeria by **Access Bank** and **United Bank for Africa** (UBA), with technical assistance provided by the **Manufacturers Association of Nigeria**, facilitates domestic commercial bank lending to renewable energy and energy efficiency companies and projects. The program may provide a template for stimulating access to capital for SMEs and other actors in the downstream plastic recycling value chain, particularly in countries with under-resourced waste management and recycling infrastructure.

Read more about case study 5 here

Policymakers can accelerate private investment in a circular economy for plastics, just as they have with renewable energy and other sectors.

Figure 1: Unlocking investment: The role of policy

A selection of policies at the national and subnational levels that help to facilitate investment.

1 Policies that support a cohesive ecosystem for plastics circularity

a. Extended Producer Responsibility (EPR) schemes (for example, the voluntary actions highlighted in *Coca-Cola FEMSA in Mexico)*

b. Design and content standards (for example, regulatory authorization for recycled content, minimum content requirements and regulation of recycled content in food-contact packaging highlighted in *Indorama Ventures in Emerging Markets)*

2 Policies that incentivize investment

a. Financing mechanisms (e.g. tax credits) that stimulate end-market development (for example, Indorama-Coca-Cola's joint venture in the Philippines)

3 Policies that reduce or share risk

a. Blended financing (for example, blue-loan restructuring for Belize)

b. Developing and deepening financial markets (for example, Indonesia's bond issuances and SUNREF in Nigeria)

Case studies

Case Study 1:

Coca-Cola bottler catalyzes growth of rPET infrastructure in Mexico

Mobilizing finance to address plastic waste in emerging markets requires coordinated action among businesses, governments, and newly created institutions and value chains. This case study from Mexico demonstrates the impact of major financing mobilized by voluntary corporate action and development institutions to create new entities and value chains. It also notes the potential for government policy to enable the necessary conditions for action. While the focus of this effort was on PET, the model could be replicated for other recyclable plastics as well.

As the Government of Mexico sought ways to improve waste management, Coca-Cola FEMSA – the world's largest Coca-Cola bottling franchise and a leading Mexican beverage company – in collaboration with PepsiCo and their bottling and plastics industry peers, helped establish ECOCE (Ecología y Compromiso Empresarial, or Businesses Committed to Environmentalism), a non-profit designed to improve recycling rates in Mexico. Initially using price incentives to encourage greater PET bottle collection, the consequent increase in recycling rates and reliability of local rPET feedstocks led to the mobilization of capital to develop local recycling infrastructure. Early on, this capital was sourced from the International Finance Corporation (IFC), a private sector-focused global development institution. Subsequent capital came from recycled plastic buyers, most recently by Coca-Cola FEMSA, via the issuance of green bonds. The aggregated capital helped create a domestic processing industry, broadened the number of market participants engaged in tackling plastic waste and increased the quantity of recycled material in plastic packaging in Mexico.

The creation of the Mexican non-profit ECOCE in 2002 proved timely, as the national government enacted the General Law for the Prevention and Integral Management of Residues the following year. This federal legislation on waste management required large waste generators to develop plans for reducing the generation of waste and increasing its value. It also required any waste produced to be treated in an environmentally sound manner.

In its early years, ECOCE worked with the Mexican subsidiary of Houston-based Avangard Innovative, a large PET aggregator with strong links to informal waste collection groups. It offered price incentives to encourage PET bottle collection and provided additional benefits to waste workers and their families, such as health and safety training for the workers and education for their children.

In the absence of domestic processing capacity, the recovered material was initially exported, primarily to China and the US. But, in 2006, Avangard and Promotora Ambiental S.A. de CV, a leading Mexican services business, formed an alliance called PetStar to build a plant for processing food-grade rPET resin for bottle-to-bottle application. PetStar partnered with Mundo Sustentable, an NGO, to monitor social risks, such as child labor, in its supply chain.

> **At Coca-Cola FEMSA, sustainability is at the heart of our organization. For many years, in collaboration with strategic partners such as IMER, ECOCE and recently with PLANETA, we have planted the seeds for relevant investments and created real alternatives to promote a circular economy for PET. We have clear goals, and we are committed to collecting 100% of the packaging that we put on the market by 2030 to achieve a World Without Waste.**
>
> **John Santa Maria Otazua**
> General Director, Coca-Cola FEMSA

> **Morgan Stanley's decades long commitment and leadership in sustainability help drive innovation and transformational progress across global capital markets. We are pleased to have served as joint bookrunner for Coca-Cola FEMSA's successful recent green bond issuance which represented the largest green corporate bond ever in Latin America at the time of issuance. We will continue to work with corporates such as Coca-Cola FEMSA to advance circularity in emerging markets and make tangible positive impacts for our clients, the environment and society.**
>
> **Matthew Slovik**
> Managing Director and Head of Global Sustainable Finance, at Morgan Stanley

By creating a reliable supply of rPET feedstock in Mexico, ECOCE was instrumental in the extension of a $24.5m loan to PetStar in 2009, which was used to construct a $33.5m recycling plant in Toluca, near Mexico City. Utilizing a blended finance approach, IFC provided $8m in senior debt and $5m as a subordinated loan, with an additional $11.5m syndicated loan coming from Cordiant Capital. The plant's success led to Coca-Cola de Mexico and its domestic bottlers agreeing to invest $34m to double PetStar's capacity in 2012. Industria Mexicana de Reciclaje (IMER), a joint venture between Coca-Cola Company, ALPLA and Coca-Cola FEMSA also began operations in 2006. Then the first bottle-to-bottle processing facility in Latin America, it has since produced more than 150,000 tonnes of recycled PET.

The PET recycling rate in Mexico increased from 8.8% in 2002 to 56% in 2018. By 2011, enough progress had been made that ECOCE was able to phase out the price subsidy it had initially offered to encourage collection. In total, an estimated $339m was invested in domestic recycling infrastructure by 2018, encompassing 16 PET recycling plants and an overall capacity of 312,000 tonnes.

In August 2020, Coca-Cola FEMSA issued a $705m green bond, following the Green Bond Principles administered by the International Capital Market Association. The reliability of PET feedstock in Mexico meant that an increased use of recycled PET could be included in the sustainability targets for the bond's use.

Strong demand for the green bond led to it being 11-times oversubscribed at its peak. This allowed the issuer to tighten the bond's pricing, reflecting an implied discount afforded by the market to green bonds over non-green equivalents.[3] It also represented Coca-Cola FEMSA's lowest ever coupon and the lowest coupon for a Latin American issuer in more than 10 years.

The markets also saw a general tightening in the yield curve for the company's outstanding US dollar denominated debt following the green bond's pricing.

In acting as joint bookrunner for the issuance, Morgan Stanley contributed to its *Plastic Waste Resolution,* a commitment to prevent, reduce and remove 50 million tonnes of plastic waste from entering rivers, oceans, landscapes and landfills by 2030.

In the first green bond report following the issuance, in June 2021, Coca-Cola FEMSA stated that it "used an average of 29% recycled PET resin (rPET) in its plastic bottles, an increase from 20.8% in 2018, reflecting the benefits of approximately $225m allocated in rPET projects from green bond proceeds."

The steady trading of the green bond post-issuance and the sustained demand from institutions at its launch foreshadowed another oversubscribed offering by Coca-Cola FEMSA: the first-ever issuance of Sustainability-Linked Bonds in the domestic Mexican debt markets, a MXN9.4 bn ($470m) offering in September 2021 that was 2.1 times oversubscribed. In January 2022, in furtherance of its sustainability commitments, Coca-Cola FEMSA announced a joint venture with ALPLA to invest $60m in a new recycling plant in Tabasco, a southeastern state of Mexico. Known as Planta Nueva Ecología de Tabasco, or PLANETA, the facility will produce 35,000 tons of rPET, as well as directly and indirectly creating an estimated 20,000 new jobs, including in PET collection.

The combination of early leadership by a corporate actor, the creation of a non-profit with a clear aim, supportive government policies and significant private capital have fostered tremendous growth in a nascent industry, generating dramatic positive impacts for sustainably managed plastic waste in Mexico.

Timeline

2002	ECOCE is created
2003	Government of Mexico passes federal legislation on waste management: the General Law for the Prevention and Integral Management of Residues
2005	IMER (Industria Mexicana de Reciclaje) is formed, a joint venture between bottle maker ALPLA and the Coca-Cola Company to establish the first food-grade, bottle-to-bottle PET recycling facility in Latin America
2006	PetStar is formed
2009	IFC and others provide $24.5m in loans to PetStar
2012	Coca-Cola de Mexico and others invest $34m to double capacity of PetStar
2018	A total of $339m has been invested in recycling in Mexico
2020	Coca-Cola FEMSA issues its first green bond
2021	Coca-Cola FEMSA issues the first ever sustainability-linked bond in the domestic Mexican debt markets

$339M

An estimated total of $339m was invested in domestic recycling infrastructure by 2018 in Mexico.

56%

The PET recycling rate in Mexico increased from 8.8% in 2002 to 56% in 2018.

Case Study 2:

Indorama Ventures secures the world's first blue loan to expand recycling capacity across emerging markets

With strong demand from its global customer base and a drive to advance its own environmental, social and corporate governance (ESG) credentials, Indorama Ventures Ltd. (IVL), the world's largest producer of PET bottles, committed to double its recycling capacity by investing $1.5 bn in processing facilities across five strategic emerging markets. To achieve this, IVL secured a blue loan financing package valued at $300m from three development finance institutions (DFIs), which has in turn funded further investments by the company in recycling infrastructure. This innovative financial instrument is the world's first independently verified, non-sovereign blue loan and has extended the development and acceptance of issuance guidelines for the nascent blue bond market.

In response to strong demand signals from customers and the introduction of new regulations in key markets, such as the EU and US, that increasingly allow for recycled content in food-contact packaging, Indorama pursued a significant investment in plastics circularity. Subsequent investment by IVL illustrates how recycled content requirements and circular economy-related tax breaks can incentivize private sector action on plastic.

IVL is a global intermediate petrochemicals producer listed on the Stock Exchange of Thailand. Majority owned by the Lohia family, it is one the largest vertically integrated plastics producers in the world. IVL's 2019 investment aimed to increase its recycling capacity to 750,000 tonnes per year, thereby recycling 50 billion PET bottles annually by 2025 and reducing the company's carbon footprint.

> **As a global leader in PET production and recycling, we are honored to receive the first blue loan from IFC. We are building the recycling infrastructure needed to divert waste from the marine environment. By recycling post-consumer PET bottles into new bottles, we give waste an economic value. This drives improvements in waste collection systems, meaning less waste and cleaner oceans. Innovative financing will be key to catalysing transformation of the circular economy globally, and Indorama's success highlights the potential for the further growth of blue financing instruments to help speed this transition.**
>
> **Yashovardhan Lohia**
> Chief Sustainability Officer,
> Indorama Ventures Ltd.

In November 2020, IVL secured its blue loan financing package from three development finance institutions: International Finance Corporation (IFC), Asian Development Bank (ADB) and Deutsche Investitions- und Entwicklungsgesellschaft (DEG). The proceeds of the loan package are currently being invested in expanding IVL's recycling capacity in Thailand, the Philippines, India, Indonesia and Brazil. This new capacity will divert significant volumes of plastic from landfills, open dumps and the ocean and encourage a more circular economy.

The ADB's $100m contribution to the package ($50m of which came from the Leading Asia's Private Infrastructure Fund, a co-financing initiative established by ADB and the Japan International Cooperation Agency) was its first independently verified, non-sovereign blue loan and followed Blue Natural Capital Financing Facility's Blue Bond Guidelines. This included requiring the borrower to commission an environmental and social compliance audit report from DNV GL.

IFC, which contributed $150m to the blue loan, identified the following environmental and sustainability benefits of the financing package:

- diversion of PET waste from land and marine environments through recycling
- reduction of greenhouse gas (GHG) emissions by replacing virgin PET with recycled PET
- implementation of other sustainability projects, such as resource efficiency and renewable energy
- promotion of a circular economy for PET bottles and the catalyzation of market changes by demonstrating innovative business models and best practices for recycling PET at scale.

Subsequently, in March 2020, IVL announced the creation of a 70:30 joint venture with Coca-Cola Beverages Philippines, Inc. to construct a greenfield bottle-to-bottle recycling plant in Cavite province in the Philippines. The new PHP1bn ($20m) facility, which becomes operational in 2022, can process 30,000 tonnes, or almost 2 billion plastic bottles every year, with an annual output of 16,000 MT of recycled PET resin and additional clean PET flake. The Philippines' Board of Investment has approved the project's status as a pioneer project under the Omnibus Investments Code, created to encourage private investment. This allows the project to qualify for six years of income tax holidays, as opposed to the four years available to non-pioneer ventures.

While there is currently no legislation in the Philippines mandating a specific amount of recycled content in plastic packaging, globally, Coca-Cola has committed to recover and recycle one bottle for every bottle that it adds to the market, by 2030. The Philippines' Food and Drug Administration is also considering several applications for the use of rPET in food-grade products. Approval of these uses is expected to set a precedent for substituting recycled for virgin resin. Despite these indicators of strong future demand, there is currently insufficient domestic recycling capacity to achieve companies' aggregated recycling targets for 2030.

In July 2021, IVL announced the planned construction of a new facility in West Java, Indonesia. Expected to become operational in 2023, the plant will recycle almost 2 billion PET bottles annually.

Although it is too soon to see significant impact on diverted plastic or GHG emissions reductions, this move from the industry leader in PET has the potential to take plastic recycling to the next level in emerging markets.

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IFC is pleased to support IVL to finance scalable solutions to address the scourge of plastic waste in our oceans. With this first-of-its-kind real sector blue loan, the IFC continues to advance the circular economy for plastics in Asia and shows that multi-stakeholder co-operation along the plastic value chain and the application of innovative financing can lead to impactful interventions to address plastic waste. We hope that our recent blue loan to IVL and our continuing work on blue financing guidelines and standards will have a demonstration effect for other private sector players to invest in this nascent space.

Rana Karadsheh
Director of Manufacturing, Agribusiness, and Services for Asia Pacific
International Finance Corporation (IFC)

Case Study 3:

Indonesia's green finance innovations pave the way for waste management infrastructure investment

Government financing plays a critical role in scaling up plastic waste solutions. By investing in waste management infrastructure, national governments signal to the market that they recognize the extent and urgency of the plastics problem. Governments often face multiple financial priorities, particularly in emerging markets. Therefore, innovative approaches to raising funds in debt capital markets are essential. The Government of Indonesia is leading the way in this arena. This case study highlights the examples of green sukuk (bond structures compliant with Sharia, or Islamic religious law), green bonds, and SDG (Sustainable Development Goals) bonds that raise capital for infrastructure, including waste management solutions, in Indonesia and provide a model for further development of capital markets in-country and beyond.

Indonesia has committed to action on plastics via the National Plastic Action Partnership (NPAP) and coordinated policy initiatives. Businesses, including plastics producers and recyclers, have noted this momentum and are taking a range of voluntary actions in support of these policies. At the same time, the government has developed and deepened the market for climate- and SDG-related debt instruments, both domestically and internationally, by conducting a series of strategic issuances over the last six years. These actions may pave the way for more specific plastic waste remediation and associated GHG reduction issuances by national or subnational entities as well as by corporates in the international and domestic debt (conventional or Islamic) capital markets.

Green Sukuk offerings

In 2015, Indonesia's Ministry of Finance, Bank Indonesia and the Indonesian Financial Services Authority established the Coordination Forum on Financial Market Development. This body subsequently published its *National Strategy for Financial Market Development 2018-2024,* a roadmap for the development of deep, liquid, efficient, inclusive and prudent financial markets in Indonesia. The issuance of sukuk and thematic bonds, including green bonds, were core elements of the strategy to develop the country's government bond market.

The Government of Indonesia subsequently developed a Green Bond and Green Sukuk Framework, based on the Green Bond Principles, to facilitate issuances. A second party opinion on the framework was provided by CICERO, which rated it Medium Green. To address the funding gap between the country's resources and its climate change-related investment needs, Indonesia embarked upon a series of international and domestic green sukuk issuances. These began in 2018 with the world's first sovereign green sukuk issuance, totalling $1.25bn and listed on both NASDAQ Dubai and the Singapore Exchange. Oversubscribed, it sought to broaden the investor base, with 32% of the offering placed with Islamic investors, including Middle East-based Sovereign Wealth Funds, and just under 30% allocated to green investors. Indonesia has since conducted annual issuances of green sukuk globally, establishing the country as the world's most prolific issuer of green sukuk.

In June 2021, Indonesia closed a $3bn global sukuk offering, including a $750m green sukuk tranche. The country has also sought to develop its domestic debt and Islamic capital market by conducting three rupiah-denominated retail offerings of green sukuk, in 2019, 2020, and 2021, totaling approximately $814m. To date, issuance under the Green Framework totals approximately $4.3bn.

> **As the world's largest archipelago, Indonesia is acutely aware of the need to combat marine plastic pollution. The government is committed to systematic action on plastic through the National Plastic Action Partnership (NPAP) and an integrated approach across national and local level policies. Through innovative financing instruments, we aim to foster greater private sector involvement in meeting this challenge.**
>
> **Rofi Alhanif**
> Director of Waste and Wastewater Management
> Coordinating Ministry of Maritime Affairs and Investment, Indonesia

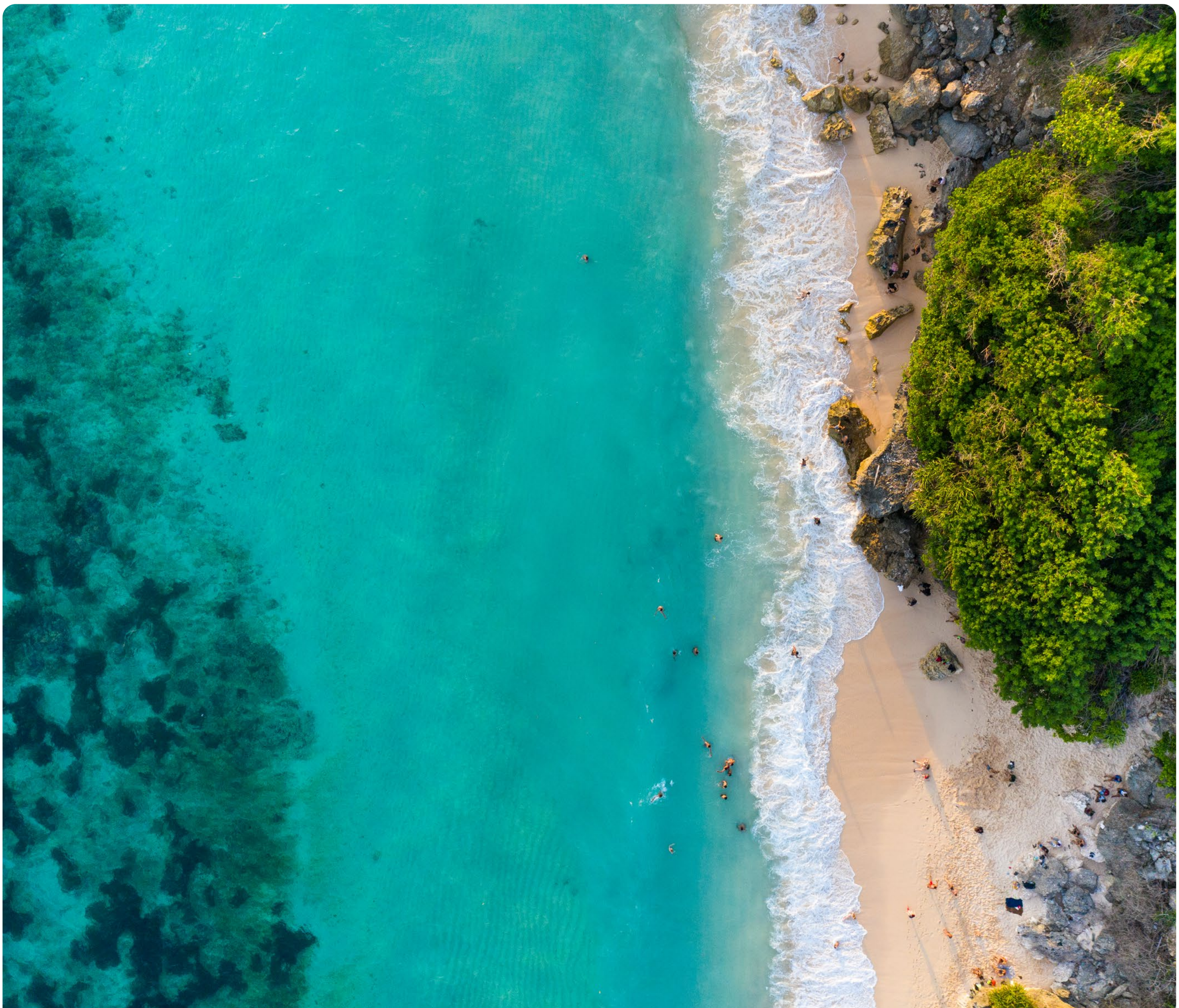
While the Green Framework does not specifically reference plastic waste remediation within its list of eligible green projects, 'Waste to Energy and Waste Management' is included as an eligible category. In its latest *Green Sukuk: Allocation and Impact Report* from May 2021, the Indonesian Ministry of Finance states that 7%, 9% and 11% of green sukuk proceeds were allocated to waste to energy and waste management projects in 2018, 2019 and 2020, respectively. Together, these projects, which primarily focus on developing landfill and final disposal sites, are expected to benefit more than 2 million households due to the improved waste management.[4]

SDG bond offering

In September 2021, building on the success of the green sukuk offerings, Indonesia became the first Southeast Asian country to issue an SDG bond in the global debt capital market. The €500m ($584m), 12-year bond was issued under Indonesia's recently published SDGs Government Securities Framework for the issuance of sukuk and green, blue, social and sustainability bonds. The SDGs Framework received a second party opinion from CICERO and the International Institute for Sustainable Development, which rated it Good–Medium Green. As with the Green Framework, 'Waste to Energy and Waste Management' is an eligible category for the use of funds raised under the SDG Framework. In implementing its *Roadmap of SDGs Indonesia*[5], the government indicated that its first issuance under the SDGs Framework will finance "purely social projects, with a focus on healthcare, improved ICT infrastructure, and education." Subsequent issuances will likely follow the template set by the green sukuk offerings and include waste management projects.

These climate change- and SDG-related issuances run alongside other creative initiatives by the Government of Indonesia in the debt capital markets. These include: the use of Instagram, Twitter and online fintech platforms to market two-year 'James Bonds' – so-called because of their 007 issuance series number – to Indonesian millennials (who were also targeted in the green sukuk issuances) in a 2019 domestic retail offering; and raising $4.3bn, through a 'pandemic bond' for the international markets in April 2020 that included a $1bn 50-year tranche – the first time a 50-year dollar deal had been issued in Asia, aside from rolling hybrid transactions.

These innovative financial instruments are still in their early stages, but with each issuance the Indonesian government is furthering market familiarity and acceptance, involving more participants and progressing the government's environmental ambitions, including on plastic pollution.



Case Study 4:

Credit Suisse, The Nature Conservancy and U.S. International Development Finance Corporation collaborate with the Government of Belize on Blue Bond for Conservation

In emerging markets, closing significant infrastructure gaps with appropriate financing can be a challenge. Private investors are often deterred by political and institutional risks and government budgets are strained across many priorities – even more so since the COVID-19 pandemic. This case study describes a highly innovative financing approach and details the critical role of development finance institutions (DFIs) in mobilizing financing and action for environmental objectives in Belize. This novel approach could blaze a trail for financing plastic waste solutions in particular, as well as other environmental or social development priorities in emerging markets.

Restructuring Belize's debt as a blue bond

A DFI's provision of political risk insurance to a loan extended to the Government of Belize – then confronting a severe economic, fiscal and debt crisis – facilitated the placement of investment grade pass-through notes[6] to private sector investors. This enabled the government to redeem $546m in outstanding sovereign debt at a 45% discount while simultaneously doubling the country's marine protected areas and establishing a fund for marine conservation.

After four debt restructurings in fifteen years, Belize's already acute fiscal position was made worse by the COVID-19 pandemic, which had a devastating impact on crucial tourist revenues.

This prompted the government to place a moratorium on debt service and explore restructuring options for its debts. Subsequently, together with Credit Suisse and The Nature Conservancy (TNC), the government devised a debt conversion for marine conservation financial structure under the auspices of TNC's Blue Bond for Conservation program.

The proceeds of a $364m issuance of pass-through notes (the blue bond) by an offshore vehicle controlled by TNC was extended as a blue loan to the Belize government. This enabled it to repurchase the country's only international bond, the Superbond, at a 45% discount to its face value. With the resulting fiscal savings, the government announced a variety of measures related to marine conservation. Specifically, it committed to undertaking a legally enforceable marine spatial plan and almost doubling the country's marine protected area from 15.9% of its ocean to 30%, by 2026. The government also embarked on a 20-year project to establish and finance a conservation fund under independent control that will engage in planning for and protecting Belize's marine ecosystem.

The political risk insurance provided by the DFC was critical to sourcing the private capital that underpins the financing structure. The DFC's participation enabled Moody's to assign an investment grade rating (Aa2 stable) to the blue bond at a time when it rated Belize's national debt as speculative and a high credit risk (Caa3 stable). As Moody's noted in its rating action, "The Aa2 rating on the blue bonds primarily reflects DFC's insurance policy to insulate blue bond holders from a default of Belize on the underlying blue loan." Other blended finance instruments might similarly strengthen the government's ability to access affordable financing as part of its conservation and economic recovery efforts.

With the government committed to developing watershed management plans for at least two watersheds, the blue bond could also help remediate plastic leakage into Belize's waterways. However, in the near-term, it is likely that the transaction's greatest impacts will come from its contribution to developing blue economy financial instruments, increasing future issuances (which may support solid waste management or circular economy projects), and demonstrating the potential of blended finance programs and instruments, particularly those supported by DFIs.

> **Credit Suisse is proud to have supported The Nature Conservancy and Belize by acting as the sole structurer and arranger of the first Blue Bond for Conservation. We recognize the critical role of financial institutions in chanelling much needed capital towards ocean conservation, as well as further developing and deepening this important market.**
>
> **Paul Bajer**
> Global Head of Credit Structuring, Credit Suisse

30%

The government of Belize has committed to undertaking a legally enforceable marine spatial plan with an aim to nearly double the country's marine protected area from 15.9% of its ocean to 30%, by 2026.

"

The Nature Conservancy is delighted to have participated in this transaction and further our Blue Bond for Conservation program. We have developed this innovative financial model to help coastal and island nations refinance national debt to unlock funding for crucial, long-term financing to help governments deliver on conservation goals and support the well-being of coastal communities.

Melissa Garvey
Global Director, Ocean Protection
The Nature Conservancy (TNC)

Case Study 5:

SUNREF: Learning from blended finance in renewable energy

The Sustainable Use of Natural Resources and Energy Finance (SUNREF) program, created by the Agence Française de Développement (AFD) and implemented in Nigeria by Access Bank and United Bank for Africa (UBA), with technical assistance provided by the Manufacturers Association of Nigeria, facilitates domestic commercial bank lending to renewable energy and energy efficiency companies and projects. The program may provide a template for stimulating access to capital for SMEs and other actors in the downstream plastic recycling value chain, particularly in countries with under-resourced waste management and recycling infrastructure.

SUNREF globally

The SUNREF program is the green finance label of Agence Française de Développement (AFD), France's bilateral development institution. Operational since 2006 and given renewed impetus by 2015's Paris Climate Agreement, SUNREF seeks to remove financial and technical obstacles that prevent financial institutions in emerging markets from extending credit for investments that further the transition to a green economy and support the UN SDGs. Eligible investments can address any of three thematic areas: renewable energy, energy efficiency and environmental performance (encompassing emissions reduction and environmental compliance).

Operating globally – with 80 partner banks in over 30 countries – the program is tailored at the country-level, providing a combination of loans, guarantees, grants and technical assistance to local partner banks and the companies and projects that they subsequently finance (See Figure 2). In addition to facilitating access to green capital, the program supports related policies of host governments and builds partner banks' capacity to finance green investments.

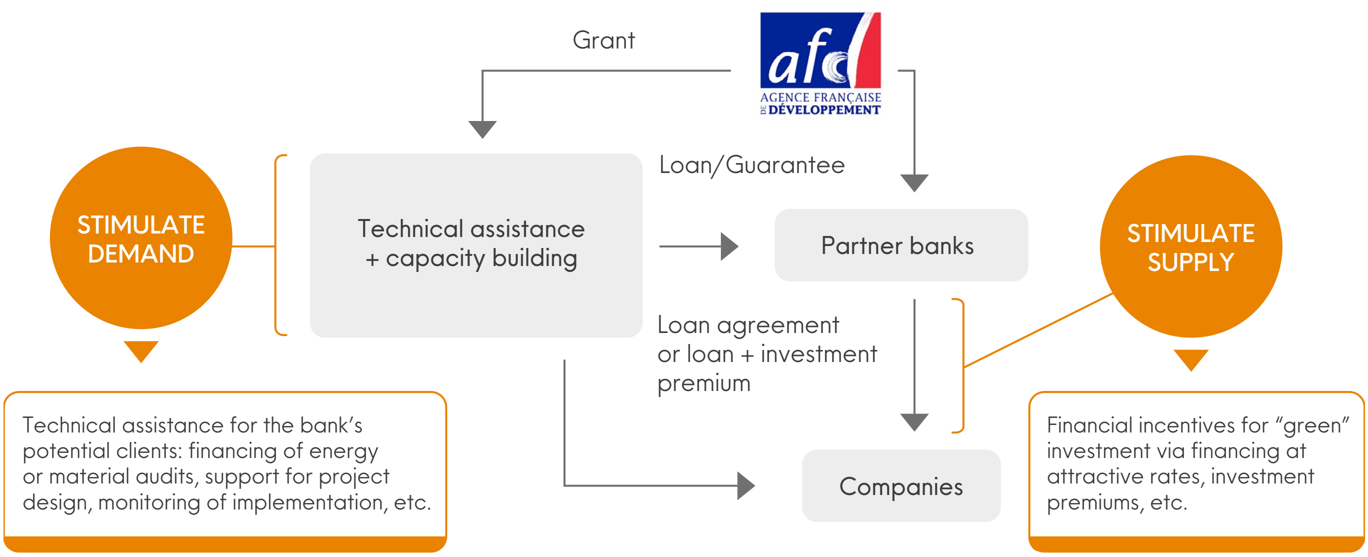
SUNREF in Nigeria

With a relatively mature financial market, and two partner banks seeking to build their green product offerings, SUNREF Nigeria launched in mid-2018. The program comprises:

- A $70m-equivalent, long-term concessional credit facility provided by AFD, divided equally between Access Bank and UBA
- A technical assistance (TA) component to identify, assess and carry out renewable energy and energy efficiency projects
- An investment grant, which includes a provision that up to 10% of any loan meeting the program's eligibility criteria and extended under the program can be repaid as a success fee.

The EU funded the TA and investment grant components through a €9.5m ($10.75m) award.

Figure 2: SUNREF program overview



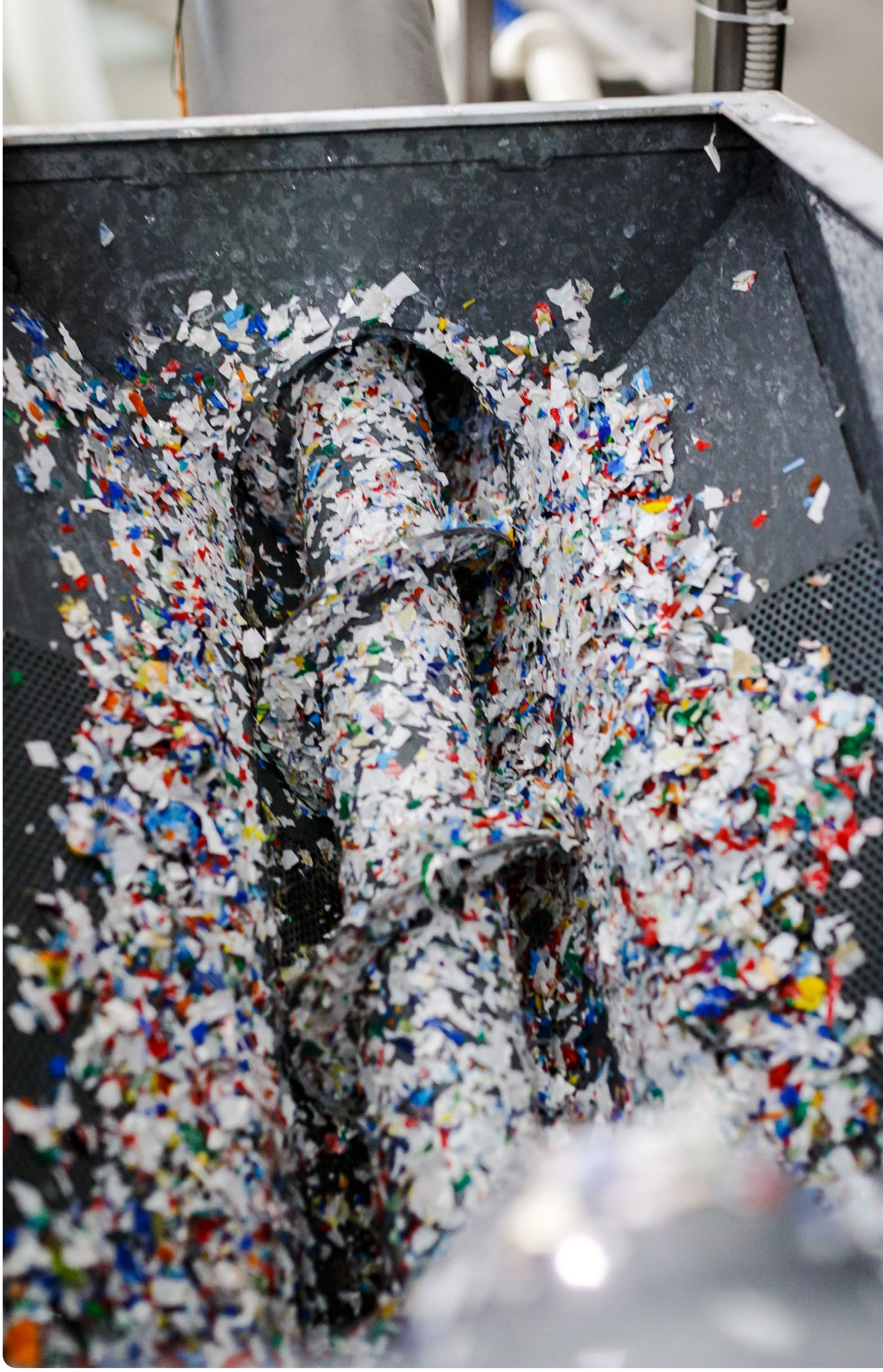
Source: AFD

Technical assistance to the partner banks and their prospective clients is provided through the Manufacturers Association of Nigeria, with Winrock International providing green energy-related capacity-building advice.

After little more than three years, the SUNREF partners have successfully disbursed the majority of their capital under the credit facility. AFD primarily attributes that solid performance to the enthusiasm of its partner banks for extending renewable energy and energy efficiency loans and to the green economy focus of the Nigerian government and the Central Bank of Nigeria.

Nonetheless, AFD also notes the difficulty in finding sufficiently mature and bankable projects – a challenge attributable, in part, to potentially onerous loan collateral requirements. Addressing such regulatory matters will form part of Transforming Financial Systems for Climate (TFSC), AFD's follow-on program that is currently under development.[7] As part of that initiative, AFD is also exploring the potential for providing investment capital to green economy start-ups, as well as using other financial instruments in its portfolio that may increase lending from local commercial banks.

The SUNREF program demonstrates the potential for bilateral and local financial institutions to collaborate on securing finance for environmentally beneficial infrastructure, including plastic waste collection and recycling.



A model for plastic waste management

In September 2021, the World Bank published its *Market Study for Vietnam: Plastics Circularity Opportunities and Barriers* paper. It notes that although a green financing framework was launched in the previous year by a local Vietnamese bank, there is a mismatch between the financing needs of the country's SME plastic recyclers and the available green finance products.

As such, it recommends, along with other regulatory changes, increasing the ability of local banks to assess the bankability of plastic recycling projects and widening the range of financial products available to plastic recycling market participants, especially SMEs. To that end, in countries confronting the growing challenge of plastic waste mismanagement, SUNREF may provide a useful template as a similar program focused on encouraging investment in plastic waste-remediating companies and projects.

€9.5M

The EU funded the technical assistance and investment grant components of the SUNREF Nigeria program through a €9.5m ($10.75m) award.

Conclusion

Momentum is building for action on plastic waste across both asset classes and regions. Now is the time for global financial institutions to seize the opportunity to invest.

1

Led by DFIs, corporates and impact investors, the transactions highlighted in the toolkit are transparent, show clear benefits and are transforming the plastics value chain.[8]

Calls to action:

- Although there have been several notable transactions involving rPET, many more are needed globally. **Mainstream financial institutions can contribute follow-on financing to enhance the infrastructure for rPET recovery.**
- **DFIs and impact investors can expand financing to plastic waste solutions beyond PET.**
- **Corporations that use plastics should continue to support the ecosystem and commit to offtake agreements that help unlock financing.**

2

Investment in new waste management and recycling infrastructure can have a positive impact on climate, ocean health and meeting the SDGs. By developing and issuing thematically relevant financial instruments, governments expand the pool of potential investors and improve the circularity of plastics.

Calls to action:

- **Governments need to make use of existing financial instruments, such as sustainability bonds, to build better infrastructure for plastics waste management and recycling.**
- **Banks can leverage DFIs and other partners to de-risk deals through blended finance schemes.**

3

In other sectors, such as renewable energy, financial institutions have collaborated to help scale infrastructure in new markets, using innovative financing mechanisms and partnerships. Policymakers can accelerate private investment into a circular economy for plastics, just as they have with renewable energy and other sectors.

Calls to action:

- **Governments need to keep enacting and enforcing policies that support a cohesive ecosystem for plastics circularity.** Doing so further incentivizes and de-risks private investment.
- **Plastics producers must anticipate and respond quickly to such policies.** Through balance sheet investment, they can make plastics recycling core to their business.

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This toolkit was co-authored by:

Grant Collins
Principal
Charlotte Square

Ellen Martin
Director of Impact and Insights
The Circulate Initiative

The Circulate Initiative

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Rofi Alhanif
Director of Waste and Wastewater Management
Coordinating Ministry of Maritime Affairs
and Investment, Indonesia

Kirana Augustina
Engagement Specialist, Indonesia National
Plastic Action Partnership (NPAP)
World Resources Institute (WRI)

Navneet Chadha
Regional Lead Resource Efficiency and Circular Economy
International Finance Corporation

Vikas Chhajer
Head of Strategy, Sustainability and Technology
Gemini Corporation NV

Taylor Clayton
Project and Community Lead,
Global Plastic Action Partnership
World Economic Forum

Bridget Croke
Managing Director
Closed Loop Partners

April Crow
Managing Director
Circulate Capital

Ben Dixon
Partner
SYSTEMIQ

Chidozie Ezike
Team Lead, ESRM/Sustainability
United Bank for Africa

Marian Fletcher
Manager
Shared Planet

Sami Ghazi
Director, Global Sustainable Plastics Partnerships
PepsiCo

Thomas Hadley
Executive Director, Fixed Income Capital Markets
Morgan Stanley

Hidayah Hamzah
Manager, Indonesia National Plastic Action Partnership (NPAP)
World Resources Institute (WRI)

Ben Hart
Project Lead, Ocean Finance
Friends of Ocean Action

Abdellah Hmamouche
Lead, Communications,
Global Plastic Action Partnership
World Economic Forum

Kristin Hughes
Director, Global Plastic Action Partnership
and Member of the Executive Board
World Economic Forum

Santiago Hurtado
Associate, Fixed Income Capital Markets
Morgan Stanley

Ben Jordan
Senior Director, Environmental Policy
The Coca-Cola Company

Colm Jordan
Global Head of Sustainability, Communications and Advocacy
Indorama Ventures PCL

Endnotes

Aissatou Kumagangue
Project Officer, Financial Sector & Public Sector Governance
Agence Française de Développement (AFD)

Imene Moussa
Director, Structured Credit
Credit Suisse

Varsha Purohit
Senior Executive
Gemini Corporation NV

Dudi Rulliadi
Senior Policy Analyst of the Center for Climate Finance and Multilateral Policy of Fiscal Policy Agency
Ministry of Finance, Indonesia

Uta Saoshiro
Lead, Sustainable Development Investment Partnership
World Economic Forum

Michaela Seimen
Sustainable Debt Strategist
UBS

Courtney Thompson
Executive Director, Global Sustainable Finance
Morgan Stanley

Fernanda Vasconcelos
Vice President, Fixed Income Capital Markets
Morgan Stanley

Vivienne Yang
Head of Business Management, Vice President of Sustainability Strategy, Advisory and Finance
Credit Suisse

1. *Breaking the Plastic Wave*, Pew Charitable Trusts and SYSTEMIQ (2020) https://www.systemiq.earth/breakingtheplasticwave/

2. Including PepsiCo's US$1B Green Bond, issued in October 2019, with a significant portion of the proceeds being used to procure rPET in North America. https://www.pepsico.com/news/press-release/pepsico-provides-update-on-us1-billion-green-bond10132020

3. Subscriber interest allowed the company to tighten the bond's pricing from initial price thoughts, or IPT, of equivalent-US Treasuries (T) plus 155 basis points (bps) and guidance of T+125 bps to an eventual T+120 bps level. This reflected a coupon of 1.850% and a 5-10 bps 'greenium', or implied pricing discount afforded by the market to green bonds over their non-green equivalents.

4. Republic of Indonesia Ministry of Finance, Green Sukuk Allocation and Impact Report (May 2021) https://djppr.kemenkeu.go.id/uploads/files/dmodata/in/6Publikasi/Offering%20Circular/Green%20Sukuk%20Allocation%20and%20Impact%20Report_2021%20FINAL.pdf

5. Ministry of National Development Planning of Indonesia (July 2019) https://www.unicef.org/indonesia/media/1626/file/Roadmap%20of%20SDGs.pdf

6. Securities that pass income from debtors to holders of the note.

7. In 2017, AFD developed the umbrella TFSC in partnership with the Green Climate Fund. Although 17 countries in Africa and Latin America and the Caribbean are eligible under the program, it has so far been implemented only in Egypt and Ecuador.

8. For further recommendations on addressing barriers to investment, refer to Circulate Capital's and the Global Plastics Action Partnership's May 2021 report: https://www.circulatecapital.com/_files/ugd/77554d_6feeec540fe141e2b7b6258d12c14db3.pdf?index=true

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