FINANCING METHANE ABATEMENT: REPORT ON SUSTAINABLE FINANCE INSTRUMENTS

An introduction to sustainable finance for methane abatement

ACTIONABLE INSIGHTS FOR A DECARBONIZING WORLD

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This report summarizes an accompanying presentation:

Financing Methane Abatement: Presentation on sustainable finance instruments.

Note on Terminology

In this presentation, the terms '**sustainable finance**' and '**sustainable debt**' refer to the universe of instruments that target environmentally or socially beneficial outcomes. This universe includes green bonds and loans, sustainability-linked bonds and loans, transition debt and blended financial products. As this presentation shows, some of these products have been used by the oil and gas industry. Use of the terms sustainable finance and sustainable debt does not imply that all entities issuing sustainable debt, or the issuances themselves, are sustainable.

The authors adhere to the guidance provided by the International Capital Markets Association (ICMA) to characterize the emerging category of instruments and transactions described in this presentation. This usage is consistent with that of other bodies including the United Nations Principles for Responsible Investment (UNPRI), the Organization for Economic and Cooperative Development (OECD) and the London School of Economics. However other taxonomies have been developed that adopt varying definitions and implications for the terms 'sustainable finance' and 'sustainable debt'.

The term '**methane abatement**' refers to a wide range of investments, activities, and practices with the result of reducing methane emissions associated with the oil and gas industry. Stakeholders may have differing views on whether certain activities fall under sustainable finance frameworks. The authors believe that reducing methane emissions is essential to achieving climate goals, and the ideas developed here are meant to foster discussion into how these activities may fit into sustainable finance frameworks.

The authors support initiatives to define how sustainable finance and methane abatement terminology should be used towards the goal of achieving standardization and clarity across global markets and stakeholders.

INTRODUCTION

Sustainable finance: A necessary toolkit

Finance is a critical tool to achieving the goals of the Paris Agreement and avoiding the worst impacts of climate change. The International Energy Agency (IEA) estimates that the energy transition will require $4.5 trillion in clean energy investments per year by the early 2030s, well above the current level of $1.8 trillion in 2023. Financial markets can be a powerful tool for directing capital where it is needed to meet critical environmental and social needs, including the energy transition.

The oil and gas industry is a major source of greenhouse gas emissions, including from methane leakage and flaring. National oil companies (NOCs) produce more than half of the world's oil and gas and are responsible for an even higher share of related methane emissions. Some oil producers, including NOCs in lower-income countries face funding constraints that limit their ability to invest in methane abatement. As such, financial instruments that encourage NOC action on methane emissions can be powerful tools to fight climate change. While NOCs have generally been less focused on methane abatement than the international oil majors, there are signs that this is changing. The time is right to use sustainable finance tools to channel financing toward methane abatement.

This report, which is a condensed version of an accompanying presentation, introduces the major sustainable finance instruments and examines recent transactions with a range of structures and goals. It assesses key ingredients for success as well as design elements that hinder a transaction's achievement of the target sustainability outcomes, setting the scene for an enhanced discussion of the challenge at hand. Future work will address recommended instrument structures to finance methane abatement at NOCs.

Sustainable debt in the oil and gas industry

While many oil companies are in a financial position to fund methane abatement projects directly, this is not always the case. NOCs, particularly those in countries with weaker sovereign balance sheets, may not have easy access to financing for these types of projects.

Most sustainable finance tools are not easily accessed by oil and gas companies for their energy transition or emissions reduction efforts. For example, green bonds, the largest category of sustainable finance instruments, are not generally eligible for use by oil and gas companies. Other products such as sustainability-linked bonds and loans can be used by oil and gas. However these products have not yet been designed specifically for methane abatement efforts.

In this report and the accompanying presentation, we review sustainable debt transactions that have been applied to uses both within and outside of the oil and gas sector. The case studies indicate that sustainable debt has potential for use by oil and gas, if the right frameworks are created and supported. We identify four key ingredients that tend to support high-integrity sustainable debt transactions:

1. **Opportunity:** Identify an appropriate and material use case, where all parties are well-aligned
2. **Due Diligence:** Carefully vet the operational, financial and governance elements of the transaction
3. **Instrument Design:** Ensure that the financial product enables genuine outcomes
4. **Reporting and Review:** Require rigorous verification of relevant elements to maximize stakeholder confidence

Our review of dozens of real-world transactions found inconsistent use of these elements. Leadership from issuers, facilitators and investors is needed to build and scale high-integrity financial mechanisms attuned to the requirements for methane abatement at resource-constrained NOCs.

FIGURE 1

Four key ingredients to a successful sustainable debt transaction

1. Opportunity

Seek opportunities where all parties are well aligned

Create a material opportunity for parties, where:

- ✓ Issuer is credible, motivated, and financially/technically capable of achieving sustainability goals
- ✓ Underwriter is credible and supportive of sustainable finance to drive real-world impact
- ✓ Investors are actively engaged in an opportunity for strong returns and sustainable outcomes
- ✓ Verifiers with credible expertise provide independent and comprehensive assessment(s)

2. Due Diligence

Ensure a credible, beneficial, and robust transaction

Ensure that the terms of the transaction clearly align with:

- ✓ Issuer's material financial and climate strategy
- ✓ Relevant (climate) science
- ✓ Current and emerging policies and regulations
- ✓ Market standards and relevant benchmarks
- ✓ Real-world sustainability outcomes

Ensure that discrete risks are identified and mitigated, including:

- ✓ Infrastructure & technology
- ✓ Commercial & transactional
- ✓ Political & regulatory
- ✓ Environmental & social

3. Instrument Design

Balance integrity, rigor, and outcomes in transaction design

Design the mechanism to enhance transaction rigor:

- ✓ Clearly define terms of finance
- ✓ Label per ICMA guidance
- ✓ Align with relevant frameworks
- ✓ Disclose appropriate exclusions
- ✓ Minimize deal complexity
- ✓ Design to best serve transaction needs, goals, and flexibilities

***Choose KPIs that:**

- ✓ Use a consistent, standardized, and science-based methodology
- ✓ Materially align with issuer strategy to drive positive outcomes

***Choose SPTs that are:**

- ✓ Additional (beyond BAU), ambitious and achievable
- ✓ Well-scoped and time-bound

4. Reporting and Review

Emphasize granularity, transparency, and verification

Provide consistent, comprehensive, regular, and public reporting on:

- ✓ Granular qualitative and quantitative details on project activities
- ✓ Relevant financial indicators
- ✓ *Progress on KPIs against SPTs
- ✓ Challenges and opportunities
- ✓ Expected impacts and overall project status
- ✓ Assessments/audits by verifiers on transaction outcomes

*Only applies to sustainability-linked instruments. Source: Renaissouk and EDF

Methane reduction and NOCs

Methane is a major source of climate pollution from the oil and gas industry, with a warming impact 82 times that of carbon dioxide over a 20-year timeframe. Eliminating methane emissions from the industry is among the fastest and cheapest solutions to limiting warming now. With solutions that are often quick to implement and cost effective, methane abatement is an attractive use case for sustainable finance.

National oil companies tend to lag behind publicly traded peers on cutting methane pollution. Just 12 of the largest 20 NOCs have set methane targets, covering around 60% of their collective production. This compares with 19 of the largest 20 international oil companies (IOCs) that have set methane targets, covering 98% of their production. But momentum is shifting: the Oil and Gas Decarbonization Charter (OGDC), announced at COP28, included commitments to reduce methane by 50 companies, many of them NOCs.

While many methane abatement solutions are reasonably low cost -- due in part to the value of recovered product -- many NOCs need outside support and resources to rapidly cut emissions. Unlike IOCs, the budget and revenue streams of NOCs are often intertwined with national budgets, limiting their ability to allocate funds at will. Many also lack the institutional capacity to plan and execute methane reduction activities. The IEA estimates a funding gap of $15-20bn for methane-reduction investments at NOCs in low- and middle-income countries, where methane reduction policies and regulations are often insufficient.

Conversely, financing methane abatement at NOCs presents a market opportunity for the financial sector. By developing financial products tailored to methane mitigation for NOCs – many of which have limited exposure to public equity and debt markets – the financial sector can enable cuts in global methane pollution while supporting the bottom line.

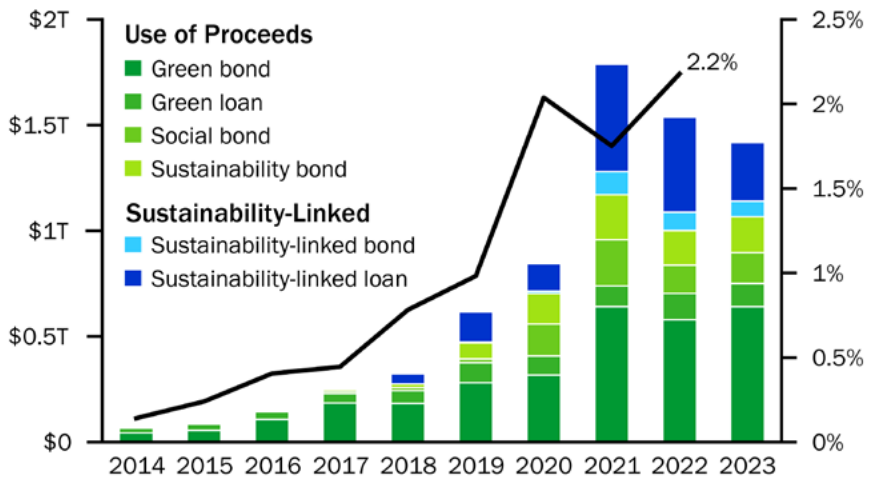
CHAPTER 1

SUSTAINABLE DEBT OVERVIEW

Sustainable debt refers to debt raised by institutions that specifically includes an aim to fund environmentally or socially beneficial projects and/or to achieve sustainability goals. Most sustainable debt falls into one of two major categories of instruments: 1) **use of proceeds instruments**, in which funds raised are directed to a specific purpose; and 2) **sustainability-linked instruments**, in which the terms of financing are linked to achieving specified environmental or other sustainability outcomes. Use of proceeds instruments include green bonds – the most commonly used sustainable debt instrument – as well as green loans and sustainability bonds. Sustainability-linked instruments include sustainability-linked bonds (SLBs) and loans (SLLs). Recent years have seen significant growth in issuance of sustainable debt, the key features of which are defined by the International Capital Markets Association (ICMA).

FIGURE 2

Sustainable debt issuance & its share* of total bond market



*Includes green bonds, social bonds, sustainability bonds, sustainability-linked bonds, and transition bonds. Source: Bloomberg New Energy Finance

A range of market participants are involved in sustainable debt markets. These include **issuers** (such as supranational institutions, sovereigns, sub-sovereigns, corporates or financial institutions), **underwriters** (investment banking arms of financial institutions – many of which have set commitments to facilitate minimum levels of sustainable finance products), and **investors** (primarily global asset managers that hold the products on behalf of asset owners, like pension funds). There is also an important role for **verifiers** – who support the tracking and reporting of sustainability progress – as well as a range of **other participants** such as project developers, coordinators, and developmental finance institutions (DFIs).

Supporters of sustainable debt instruments say they can bring benefits to both issuers and investors, while mitigating externalities. The benefits to issuers include engagement with a range of new investors, which can lead to greater price stability as well as the potential to increase the volume of financing and, in some cases, bring down financing costs. The benefits to investors include lower sustainability risks, unlocking positive impact, and alignment with sustainability goals.

At the same time, the sustainable debt market has been subject to criticism. Some observers have argued that the market creates an illusion of sustainability that masks limited underlying action. Such critiques include lack of ambition, limited transparency, financing that is seen as tangential to a company's core transition strategy, financing that overlooks the lack of a clear decarbonization strategy, and a lack of alignment between the terms of finance and envisioned changes.

FIGURE 3

Market participants involved in sustainable debt

	Issuer	Underwriter	Investor	Verifier	Others
Role	Borrows capital, pays interest and principal	Arranges financing for fee and advisory for issuer	Lends capital, receives interest and principal	Tracks and reports sustainability progress	Support implementation, risk mitigation, etc.
Examples	Financial institutions (international, regional, private, etc.), sovereigns, corporates	Financial institutions (almost always private sector banks)	Global asset managers, on behalf of asset owners (pension funds, sovereign funds, retail investors, etc.)	NGOs, auditors, independent consultants, etc.	Project developers, coordinators, development financial institutions, etc.

Source: EDF

There is some truth to both these perspectives. Our case studies capture a range of transactions, some of which have been more effective than others in achieving sustainability goals and wider acceptance. However, the market – especially for newer instruments such as sustainability-linked and blended finance products – is still relatively immature. These markets should be developed to be more robust and reflect increasing integrity.

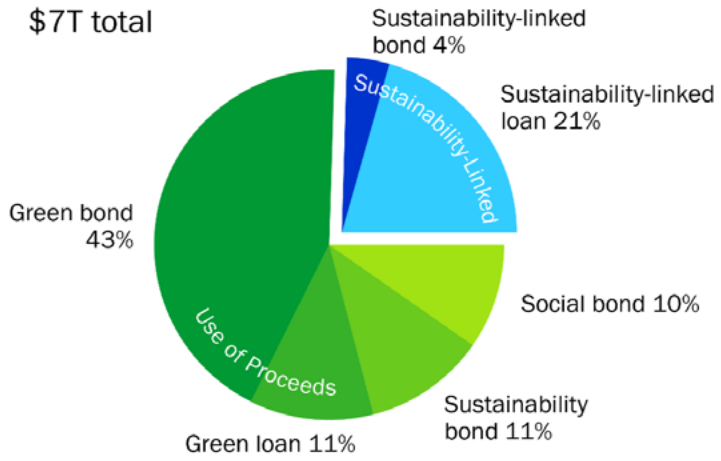
CHAPTER 2

SUSTAINABLE DEBT: TYPES AND EXAMPLES

Sustainable debt issuance occurs across a spectrum of instruments, with differing benefits and costs. The main categories are 1) use of proceeds instruments (Green, Social, and Sustainability Bonds and Loans, or GSSB+) and 2) sustainability-linked instruments (SLBs and SLLs). We also discuss 3) transition debt, 4) blended finance and 5) alternative and unlabeled debt.

FIGURE 4

Sustainable debt by instrument type, issued 2014-2023



Note: Transition debt issuances are included in the chart above as either use of proceeds or sustainability-linked issuances depending on their structure; these were worth just $3.5bn in 2022 according to CBI, a fraction of the overall sustainable debt market. Blended finance, which is not included in this chart, has mobilized $213bn cumulatively through 2023, according to Convergence, of which 10% represents notes, bonds and impact bonds. Alternative and unlabeled debt is not clearly tracked.

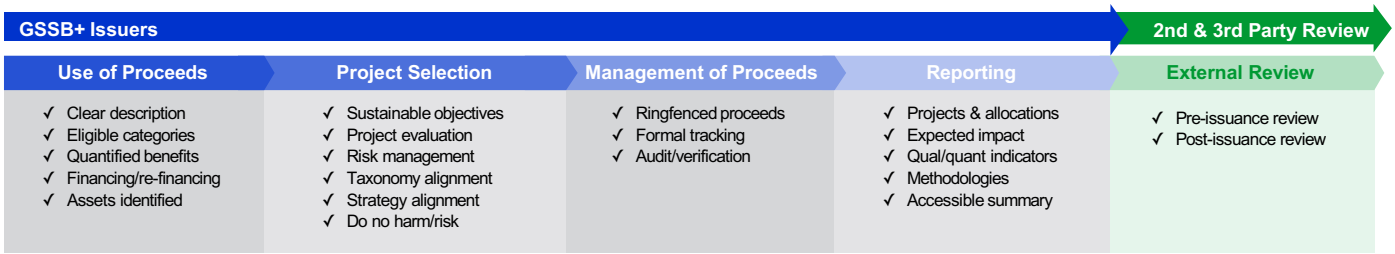
1. Use of proceeds instruments and green bonds

Use of proceeds instruments make up the largest group of sustainable debt instruments and are dominated by green bonds, representing nearly half of the sustainable debt market. The green bond market is the most mature within sustainable debt, as indicated by its size, a larger and more robust ecosystem of guidance, and a growing history of transparency and reporting.

From the perspective of the investor, a green bond is financially identical to any other bond. It pays coupons and returns principal to investors at a maturity date, without bearing any additional risk related to its sustainability goals. However, the proceeds from these must be allocated to eligible uses with quantifiable sustainability benefits. ICMA-eligible green bond categories include renewable energy, energy efficiency, clean transport, pollution prevention/ control, green buildings, natural resources/land use/biodiversity, water/wastewater management, and circular economy. Similar guidelines are available for different types of use-of-proceeds instruments, which include social bonds (pursuing social objectives), sustainability bonds (pursuing other sustainability objectives), and green loans (similar to green bonds but taken on as a loan). Project selection, management of proceeds, reporting and external review are all prescribed in the bond documentation.

FIGURE 5

ICMA voluntary process guidelines for use of proceeds bonds



Source: International Capital Markets Association

Examples of use of proceeds bonds:

- The **European Infrastructure Bank (EIB)** raised €70bn in Climate Awareness Bonds over the 2007-22 period in several currencies, for a variety of projects across industries. Proceeds were lent to borrowers in categories described as enabling (electricity transmission/distribution, infrastructure for low carbon road, public transport and rail), low carbon (energy, heat and cooling from renewables) and transition (building renovation, urban and suburban transport, road passenger transport). This issuance was widely seen as successful thanks in large part to its high level of transparency and its alignment with the EU Taxonomy, which was established by regulation as a classification system for economic activities aligned with achieving net zero by 2050.

- The **Bank of China**, a leading green bond issuer, raised $489bn in use of proceeds bonds using a variety of ICMA-aligned sustainable bond labels in nine global markets during the 2016-2022 period. Projects were diverse, touching on clean transport, renewable energy, and green buildings, among others. On the positive side, these bonds have been accompanied by consistent, regular reporting and external assurance provided by EY, although only the bonds issued in 2017, 2018 and 2019 were certified by the Climate Bonds Initiative. Yet, the limited reporting transparency (at the portfolio-level, as opposed to project-level) and uncertainty about the proportion of refinancing are further areas for improvement.

2. Sustainability-linked instruments: sustainability linked bonds and loans

A drawback of use of proceeds bonds is that the funds raised can only be spent on certain activity types, which excludes some uses of capital that might serve to reduce emissions. For example, an investment in leak detection by an oil and gas company seeking to reduce methane emissions would not be an acceptable use of proceeds for a green bond.

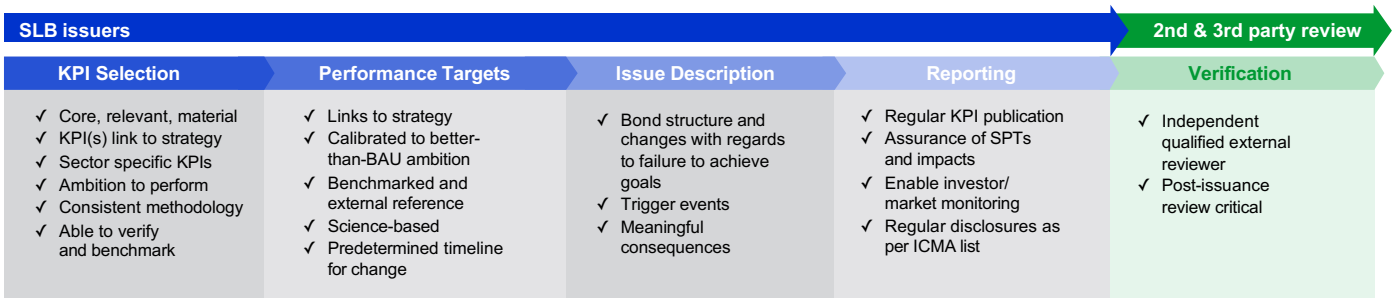
Sustainability-linked instruments such as SLBs or SLLs offer a way for companies to raise capital towards sustainability goals without restriction on how the funds are used. Sustainability goals are defined by sustainability performance targets (SPTs), which are selected by the issuer to show measurable improvements towards sustainability goals over a defined timeline and for which specific key performance indicators (KPIs) are used to track progress. These are general purpose debt instruments, with no/few sustainability conditions around how the proceeds are used. Yet they often do come with a penalty to the issuer – usually a step-up in coupon payment – if the SPTs are not achieved.

Sustainability-linked instruments represent about 25% of sustainable debt issuance, a share that fell last year as SLB issuance declined. With a shorter history than use of proceeds bonds, these instruments have been subject to considerable scrutiny due to concerns over a lack of consistency, a perceived lack of ambition and often limited transparency. In particular, SLLs have faced criticism for a lack of transparency, partly a result of the loans being private, bilateral transactions that do not require public reporting.

Considerations in designing a high integrity sustainability-linked transaction include a strong design of SPTs and KPIs, appropriate conditions and penalties for failure to meet them, and robust reporting and verification. KPIs tend to be sector-specific and selected based on the desired sustainability improvements by the issuer.

FIGURE 6

Sustainability-linked bonds process



Source: International Capital Markets Association

Examples of sustainability-linked bonds in the oil and gas and power sectors

- **Eni**, the oil major, completed a €2bn SLB issue in January 2023, placing an ICMA-aligned sustainability-linked bond with a 5-year tenor. This was the first example of an SLB from an oil and gas issuer and was used to fund the scale up of 5GW of renewable energy generation capacity by end-2025, along with a goal of reducing upstream emissions to 7.4mn tons CO2e by end-2024. There were some concerns over aspects of the bond. A second-party opinion (SPO) by Moody's suggests a limited overall contribution to sustainability and points to doubts about the credibility of the organization's decarbonization strategy, primarily due to its investments.

- **Enel**, the Italy-based global utility, issued a €1.5bn SLB in Feb 2023. Sustainability KPIs include EU Taxonomy-aligned capex, Scope 1 and 3 power emissions intensities, and absolute Scope 3 retail gas emissions. The bond was the first to link performance with the EU Taxonomy and is transparent in terms of the timeline and key data points for triggers.

Enel is among the few utilities to have developed a validated SBTi net zero target. However, there are suggestions that the company will pay increased interest expenses since it may fall short of its Scope 1 power emissions intensity target, due to the Italian government's extension of coal generation assets. Market participants will watch for evidence that penalties function as intended.

Examples of sustainability-linked loans in the oil and gas sector

- **Shell** issued a $10b sustainability-linked revolving credit facility in 2019. The issue was reportedly linked to Shell's progress towards reaching its short-term "Net Carbon Footprint (NCF) intensity" target, which it reports achieving for 2021 and 2022. Shell reports achieving its corporate goals to reduce its NCF by 2-3% by 2021 (vs 2016) and 3-4% by 2022. However, given the limited public disclosures associated with loans, it makes evaluation of the transaction's sustainability features difficult.

- **Petrobras**, the Brazilian national oil company, issued a $1.25bn sustainability-linked loan in 2022. Though the SPTs were not explicitly specified in public reporting, it appears that Petrobras had already achieved its corporate targets (which align with the public wording of the SPTs) at the time of issuance. Further evaluation of the transaction is limited by the lack of specificity in public disclosures. On the positive side, the company joined OGMP 2.0 not long after issuance, creating increased credibility for Petrobras as it pursues methane emissions reduction (one of the two SPTs).

3. Transition debt

Another class of instruments that has seen limited deployment so far is transition debt. These instruments, which can be either use of proceeds or sustainability-linked, are intended to channel financing to low-carbon transition activities by carbon-intensive industries. Developing standards, such as ICMA's release of transition finance guidance for issuers, could spur further innovation.

Transition debt relies heavily on the credibility of a carbon-intensive issuer's emissions reduction strategy and achievements. Potential uses for transition bonds include upstream and downstream emissions reductions (e.g., oil, power); carbon capture, use and storage; fuel switching to natural gas (e.g., power plants, shipping); land use to reduce deforestation; supply chain review; and decarbonization and greater recycling of materials in hard-to-abate industries.

Examples of Transition Debt

- In 2021-23, the **European Bank for Reconstruction and Development** (EBRD) raised €1.1bn in a transition bond to be used towards use-of-proceeds projects that contribute to Paris alignment. Although the terms exclude associations with fossil fuel borrowers, it permitted lending to companies in other carbon-intensive sectors that may have found it challenging to raise green finance. The bond provided for internal assurance rather than external review and offered limited transparency into specific projects.

- **Snam**, an Italian energy infrastructure firm, issued €650mn in transition bonds in November 2023, representing improved framework alignment and greater corporate climate ambition, compared with previous issuances. Eligible use of proceeds included operational emissions reductions (boiler replacement, network electrification, leak detection, valve replacement), renewables (biomethane acquisition and biogas upgrading) and energy efficiency (facilities, supply chain, industrial product). The bond included alignment with the EU Taxonomy, OGMP 2.0 targets, and SBTI-guided net-zero Scope 1 and 2 by 2040 (and interim) targets. A review by IEEFA raised several points of concern: no inclusion of Scope 3 reporting or targets, slow and limited capex deployment, and an unclear corporate energy transition strategy.

4. Blended financial products

In recent years, blended finance has emerged as a new impact financing tool. Blended finance combines catalytic capital – provided by governments, multilateral development banks, development finance institutions, philanthropies, or others -- with private capital into structures intended to address sustainability goals. Blended finance can be designed to enable decarbonization investments that would otherwise be seen as too expensive or risky for general investors, particularly in emerging markets. Examples of catalytic capital include political risk insurance, credit guarantees, and first cost/loss subordination.

Blended finance tends to be characterized by complex, custom-built structures that cater to the needs of the relevant deal participants, and so far these transactions have been difficult to replicate or scale. In addition, the unique features of each deal render credit analysis difficult.

- **Blue bonds for ocean conservation in Belize.** In a unique November 2021 transaction, The Nature Conservancy (TNC) provided donor-funded catalytic capital to reduce Belize's debt burden while unlocking funding for ocean conservation. Bolstered by support from a political risk insurance policy from the US Development Finance Corporation, the blended finance transaction has seen Belize remain on track for both its conservation and repayment milestones. However, the transaction relies upon strong fiscal performance by the Belizean government, which continues to have a sizable debt burden.

- **Wildlife conservation bonds in South Africa**. The World Bank pioneered the 'rhino bonds' in March 2022, through which investors would be rewarded with a single success payment from the Global Environment Facility tied directly to the outcomes of rhino conservation efforts. The December 2023 update report indicates strong progress against a variety of metrics (including annual rhino population growth rate, the metric linked to the success payment). Concerns remain over how population growth will be preserved post-transaction and how external risks will be mitigated.

5. Unlabeled and alternative debt cases

Unlabeled bonds with lighter requirements may be swifter options for inherently green companies or those with high credibility. Alternative debt labeling could offer flexibility for specific, nuanced transactions.

- In September 2022, **Nordea** issued €400mn in a general corporate purpose bond to fund its portfolio of SLLs in a first-of-its-kind transaction. The issuance enabled the Scandinavian financial institution to rapidly gather and deploy capital for underlying SLLs to their broad portfolio of clients – but there remains a lack of visibility into the terms and goals of the underlying loans.

FIGURE 7

Summary of case studies discussed in accompanying presentation

Instrument Type	Case-Study Issuer	Size	First Issuance	Strengths	Concerns
Use-of-Proceeds	EIB	€70bn	2007	Exceptional transparency, aligned with EU Taxonomy	Less external assurance than peers
	Bank of China	$489bn	2016	Consistent and regular reporting, external assurance	Limited project transparency and unclear distinction on new or refinancing investment
Sustainability-Linked Bonds (SLBs)	Eni	€2bn	2021	High investor demand, issue penalty raised, material improvement vs BAU	Target choices and timelines, not aligned with major investments
	Enel	€1.5bn	2023	High investor demand, aligned with EU Taxonomy, SBTI-certified net-zero target	Suggestion that SPT will be missed, narrower KPIs are less relevant
	Enbridge	$1bn	2021	High investor demand, disclosed sustainability strategies	No absolute emissions or renewable capacity SPTs
Sustainability-Linked Loans (SLLs)	Shell	$10bn	2019	Externally verified, reportedly linked to Shell corporate target	Low transparency as SLL
	Petrobras	$1.25bn	2022	Separate commitment to OGMP 2.0	Low transparency as SLL and corporate targets reportedly achieved at issue
	Diversified	$1.2bn	2022	Separate commitment to OGMP 2.0	Low transparency as SLL
Transition Debt	EBRD	€1.1bn	2021	Criteria for Paris alignment and exclusion	No external review and limited project-specific transparency
	Snam	€300mn	2022	Alignment with EU Taxonomy and OGMP 2.0, improved framework ambition	No Scope 3 reporting/targets, slow and limited capex deployment, unclear energy transition strategy
	Repsol	€1.25bn	2021	Includes Scope 3 in SPT, strong climate ambition relative to peers	Low investor demand, non-transparent KPI and no framework alignment
	BapCo	$2.2bn	2023	NOC leadership on transition finance, external experts	Limited coverage of Scope 3 target, limited disclosure on financing terms and strategy
Blended Finance	Blue Bond	$364mn	2021	Debt-for-conservation innovation, insurance	Highly complex structure, dependence on Belize fiscal health
	Rhino Bond	$150mn	2022	Payments contingent upon certified success (on track)	Highly complex structure, unclear risk mitigation
	Forest Bond	$29mn	2018	Further expansion expected, strong state agency buy-in	Limited transaction size, highly complex structure
Alternative and Unlabeled	Nordea	€400mn	2022	First-of-its-kind to fund SLLs	Unclear visibility into underlying loans
	Enel (SDG)	$1.5bn	2019	High investor demand, corporate alignment	Only one SPT referencing SDGs, no framework alignment

FIGURE 8

Suitability of sustainable debt instruments for methane abatement finance

Instrument	Potentially suitable characteristics	Likely challenges
Use-of-Proceeds (GSSB+)	• Limits finance to eligible activities only • Transparent disclosure and verification • Well-developed, already commercial structure	• Institutional exclusions against lending to fossil fuels • Difficulties with defining and ringfencing eligible activities for methane abatement • Traditional UoPs do not typically require organization-wide transformation strategy • Harder to deploy for initiatives with less visible, smaller project pipelines
Sustainability-Linked Bonds	• Provides flexibility for approaches to methane abatement • O&G companies have already issued SLBs • Multiple, clear KPIs can highlight progress	• Less visibility and transparency of funds' deployment for methane abatement • Requires more ambition and meaningful penalties than most SLBs so far • Lack of methane-focused KPIs to-date
Sustainability-Linked Loans	• O&G companies have already issued SLLs, including NOCs • Flexibility in loan size, structure, and disclosure • Closer collaboration/relationship between NOC and lender(s)	• Significant lack of transparency across all deal aspects • Unlikely for private lenders to require methane MRV • Does not typically require organizational commitments/transformation
Transition Debt	• Enables lending to O&G, including NOCs • Typically requires Paris-aligned transition plans and investments • Ability to blend UoP/SLB elements: restrictions on eligible activities (could require methane MRV), multiple KPIs, etc.	• NOCs typically lack Paris-aligned transition plans, targets, and investments • Transition finance frameworks still a work in progress • Similar pitfalls of UoP/SLB elements: lack of ambition, defining eligible methane abatement activities, limited external stakeholder support, limited transparency, etc.
Blended Finance	• Specifically aimed at development of emerging markets • Range of tools and creative structures with existing track record • Strong stakeholder buy-in fosters transparent reporting (and often, achievement) of impacts and financed activities	• Complex to structure, resulting in longer development time and higher costs • Requires buy-in of multiple, credible, and (preferably) impact-oriented stakeholders • Low quantum of capital dedicated to scaling blended finance tools • Typically needs DFIs and donors to originate, lead, and anchor transactions
Alternative and Unlabeled Debt	• Tailoring financial tool to the nuances of the challenge • More attractive to NOCs with limited exposure to public markets • Faster and more flexible to structure	• Flexibility allows for low-integrity approaches • Too rare to illustrate best practice

Source: Renaissouk and EDF

CHAPTER 3

TAKEAWAYS: FIRST STEPS FOR FINANCING METHANE ABATEMENT

The overview of sustainable debt in this report and the accompanying presentation is intended to inform forthcoming work on how sustainable debt structures might be used for methane abatement, particularly at NOCs. Follow-up research will explore methane abatement finance structures in greater detail.

As our examples have shown, each of the major sustainable debt categories have advantages and shortcomings. While not every instance of an instrument demonstrates the same advantages and shortcomings, we identify their typical features for consideration when evaluating approaches to methane abatement structures.

Methane abatement at NOCs presents a unique set of challenges. Designing instruments to do this effectively will require further innovation that incorporates the four key ingredients for successful issuance noted earlier in this report: opportunity, due diligence, design and reporting.

A successful instrument for financing methane abatement at NOCs is likely to include a few critical elements:

1. **Near-zero methane emissions ambition.** NOCs interested in acquiring financing for methane abatement activities should commit to achieving ambitious methane targets: near-zero methane emissions within a near-term time frame, in alignment with leading commitments from the global O&G industry.
2. **De-risking investments in emerging market NOCs.** These companies, for a variety of reasons, face elevated credit, currency, political, and regulatory risks that have chilled interest from non-state investors. Accounting for and overcoming these barriers will be essential to generating a supply of finance from investors with limited exposure to emerging markets.
3. **Methane measurement, management, and transparency.** Common reporting methods significantly misrepresent the scale and nature of O&G emissions, so strong measurement, reporting, and verification (MRV) practices are needed to ensure that real-world methane emissions are reduced. Joining the Oil and Gas Methane Partnership (OGMP 2.0) can help NOCs provide data according to best-in-class reporting frameworks.
4. **Eligible uses of financing.** It will be critical to ensure that financing provided through sustainable debt instruments is used only for eligible activities by NOCs to achieve stated emissions reduction goals. This will require clearly defining eligible methane abatement activities, transparent disclosures from NOCs and involved parties, enhanced market oversight and due diligence, and credible third-party verification.
5. **Appropriate size and structure of issuance.** Instruments should be designed to account for the nuances of the challenge at hand: activities to abate methane may range significantly in capital volume required, ROI generated, and technical expertise/resources used. A successful issuance would be structured to provide both flexibility and integrity across a variety of project needs.
6. **Credible stakeholder engagement.** For NOCs interested in reducing emissions and improving financial health, engaging a variety of stakeholders – including the national government, industry partners, providers of capital, and 2nd and 3rd parties – is important to demonstrate credibility. Stakeholders can play a variety of roles, from independent verification to technical support, that enhance the transaction's sustainability and financial goals.

Designing sustainable debt instruments to finance methane abatement at NOCs will require further innovation. While no instrument in its current form comprehensively addresses the nuances of the challenge, the rewards for success – a stream of financing to NOC methane abatement that enables rapid achievement of near-zero methane emissions by financed companies – is well worth the effort.

ADDITIONAL RESOURCES

Accompanying Presentation:
Financing Methane Abatement: Report on Sustainable Finance Instruments

More from EDF:
EDF Climate Insights Hub
EDF Activating National Oil Companies for Climate Progress
Plugging the Leaks: An Investor Guide to Oil and Gas Methane Risk

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