Climate Catalyst

Impact and Learning Report 2024

Powering climate action with trust-based collaboration

About Climate Catalyst

Climate Catalyst strengthens collaboration and mobilises new actors on pivotal climate challenges.

We work behind the scenes with diverse stakeholders in Europe and Asia to identify opportunities where action to date has been limited, the potential for collaboration is high, and there's significant potential to reduce greenhouse gas emissions. We then bring together renowned experts and new entrants to deliver creative campaigns that build power and secure decisive action by governments and the private sector to ensure we reach our vision of a just, prosperous world in which global temperature rise is limited to 1.5°C.

To date, we've sparked collective action in support of peatlands protection in Europe and to secure positive shifts towards steel decarbonisation in India and aviation in Europe. In 2024, we also developed a new programme on heavy industry in Indonesia, which will launch in 2025.

Find out more at www.climatecatalyst.org, on LinkedIn, X, BlueSky or email us as info@climatecatalyst.org.

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Who we are

Vision

A just, prosperous world in which global average temperature rise is limited to 1.5°C.

Mission

To compel leaders to take action at speed and scale. We do this by galvanising the collective power of businesses, investors and civil society to influence and accelerate policy change.

We do this by:

Consulting
Engaging with diverse stakeholders to identify targeted programme opportunities that have the greatest potential for collaboration to accelerate climate action.

Convening
Bringing new and diverse organisations together to share ideas and learnings and design a potential programme.

Catalysing
Delivering creative strategies and other forms of support to build power and secure decisive action by governments that reduce greenhouse gas emissions. Working together to share learnings as we go.

Values

- Be courageously open-minded
- Collaborate to accelerate
- Always be inclusive
- Listen and learn

Our Theory of Change

Foreword from Céline Charveriat, Advisory Board Chair

I am delighted to introduce this report, capturing the progress and learning from the work of Climate Catalyst and our partners in 2024. It's been an exciting year. We've made important strides through our work in India on steel and Europe in aviation, tightened our value proposition in light of our learning in 2022–24, and established a new programme in Indonesia.

Our aviation work in Europe has advanced investor understanding on sustainable aviation fuels, in particular e-fuels. This is helping create the conditions for successful e-fuel plant development to meet new European and UK fuel mandates. Another highlight of this programme has been our work with over fifty organisations in four European countries to develop evidence-based messaging challenging traditional aviation narratives. This is critical if we are to develop a wide base of public support for a just and rapid transition in the sector.

It's been a milestone year for steel decarbonisation work in India, with the publication of a ground-breaking government roadmap in September. We contributed to this in a range of ways, and built a shared perspective on decarbonisation pathways among over fifty organisations who are members of the India Green Steel Network which will be the foundation for our work in 2025 We were delighted to see clear commitments to Green Public Procurement (GPP) as a high priority.

These achievements clearly validate Climate Catalyst's model for nurturing high-impact collaborations within the climate ecosystem and demonstrate the potential for scaling our work and impact in the next three years.

I am excited to see what 2025 will bring, and to work with a refreshed board as Climate Catalyst moves out of fiscal sponsorship and becomes an independent organisation. Finally, thank you to all my fellow advisory board members who made such valuable contributions in 2024.

Introduction by Stephen Hale, Chief Executive

2024 has been a whirlwind! Huge thanks to the partners, funders, and allies on our Advisory Board and Strategic Council with whom we have worked and learned this year. I'm proud of the progress we've made thanks to you all in our work in India, Europe and now Indonesia.

It's been another turbulent year, with conflict and bitter divisions between the world's most powerful economies, and a series of momentous elections for over half the world's population. But the underlying drivers of growing global concern over climate impacts, the race for competitive advantage in low carbon industries and the renewables revolution are more powerful than any one leader or negotiation.

We win or lose the climate battle through countless struggles - one country, one sector, one investment decision at a time. Our model of trust-based collaboration can unlock progress for the causes on which we focus. We continue to see new government commitments and private sector investments. In our case, we celebrated significant new commitments to action following elections in India and Indonesia - on steel decarbonisation in India, and on fossil free power generation by 2040 in Indonesia.

Lasting change requires us to create the conditions for collective action - mobilising new actors, building unlikely coalitions and shifting existing narratives. While no two countries or sectors are the same, we can always accelerate progress by finding new ways to collaborate and share innovations. We must build ecosystems in which we use our collective power, knowledge and ingenuity to secure policy change and shift investment.

I'm truly energised by the momentum and partnerships we take into the new year. We will continue to adapt and evolve in response to all that 2025 will bring us.

Our mission in action:
Decarbonising the steel sector in India

India is home to the second largest steel industry in the world. It contributes 11 per cent of India's total CO_2 emissions. Production is expected to triple by 2050 as India's economy continues to grow. Measures to decarbonise the Indian steel sector urgently need to be accelerated as part of this growth. We began 2024 with strong momentum and interest in the India Green Steel Network to work together on this. Building strong, strategic collaborations across the public, private and civil society sectors will be key to unlocking ambition on steel decarbonisation in India, and making this issue a priority at the highest level of government.

Programme goal: To accelerate steel decarbonisation in India by building collaboration and raising ambition of the public, private, and civil society sectors, and promoting the adoption of green public procurement policies in key infrastructure ministries.

Impact highlights

- In 2024, we helped bolster the shared ambition and collective action of the Indian steel ecosystem, through the growth of our India Green Steel Network (IGSN), to advocate for and support the government to deliver an accelerated pathway to steel decarbonisation.

  - In September, we hosted our 2024 Convening where network members aligned on technology pathways and the enablers required to accelerate their implementation. This event, attended by 40+ members helped to build closer collaboration and active engagement among the steel ecosystem. A key output was a joint position paper on steel decarbonisation. The paper aims to drive collective action and advocacy within the network and will enable us to identify key policy priorities and activities for the network in 2025 and beyond.

  - In 2024, we also launched our GreenSteel45 learning series (GS45) and hosted four events on topics including green hydrogen use in the steel sector, the role of sustainable finance in accelerating decarbonisation, green public procurement as a policy lever, and evaluating the opportunities and challenges of carbon capture, use and storage. These widely attended bi-monthly, virtual events are a critical knowledge sharing opportunity for IGSN members as well as being a chance to avoid duplication and identify areas of collaboration across organisations, supporting our aim for the network to be a a key platform for building partnerships across research institutions, industry players, civil society stakeholders, and investors.

The IGSN has:

90+ members | **56** organisations

including steel producers, institutional investors, think tanks, funders and civil society organisations.

4 GS45 events

~20 attendees per session

4+/5 rating on value

In September 2024, the Ministry of Steel published a first of its kind roadmap for Indian steel decarbonisation. In it, the ministry commits to green the steel sector in line with the country's net-zero by 2070 target. The government has identified a green public procurement policy as a critical lever towards this, in line with our advocacy on this topic and we hope to support this commitment by developing an evidence base in support of such a policy. The Ministry also released the taxonomy for green steel and a draft green steel mission to implement various policies in line with its target.

- In 2024, we engaged with policy makers from a number of ministries to identify which department would be the strongest advocate for policies on green public procurement (GPP) for steel. Ministries engaged included Railways, Road Transport and Highways, Steel, Ports and Shipping, and Power (Bureau of Energy Efficiency). Through this process we learned that the Ministry of Steel is planning to introduce a GPP policy - having indicated a commitment to purchase low-carbon steel starting 2026-27 onwards, with volumes rising up to 10.6 million tonnes annually by 2031 - and is the appropriate target for our research support. In 2025, we will commission research to ensure that the GPP policy is implemented rigorously and informed by evidence and best practices domestically and internationally.
- In June 2024, we launched a Sustainable Finance Working Group under the IGSN to address systemic challenges in the flow of sustainable financing into green steelmaking, which now has over 40 organisational members. Adopting low-carbon steel technology will need close to US$200 billion globally to 2050 (Climate Policy Initiative, 2022), and this working group aims to increase domestic and international financing to meet this ambition. The Working Group identified key constraints to the flow of climate-aligned finance in the steel sector, such as insufficient policies at the required rate and scale and a lack of tailored financing and de-risking solutions. The Working Group aims to support scaling transition finance, promoting the flow of finance towards low-carbon, transitional activities and technologies. In 2024, led by Climate Policy Initiative, the working group drafted transition finance recommendations and an action plan.

What we learned in 2024

- Ship recycling offers valuable steel but isn't a silver bullet for secondary steel making in India. Our hypothesis, from early scoping, was that ship recycling could support steel decarbonisation by providing a predictable source of melted scrap and meet a significant proportion of the demand for use in secondary steel making. However, through research conducted on our behalf by the Climate Group, we discovered that there is, in fact, limited scrap available within the ship recycling sector, with much of it instead being used for value-added steel products directly, with cutting and re-rolling. We detailed these findings in a report Turning the Tide: Ship Recycling as a Source of Green Steel in India, launched in November 2024. Meanwhile, the report sets out a comprehensive suite of policy recommendations that can contribute to building India's sustainable ship recycling ecosystem, which can be used by others working on shipping. We've already received positive feedback by industry leaders such as Maersk and GMS as well as policymakers in the Ministry of Shipping, citing the value of the research in enhancing their understanding of the ship recycling ecosystem.
- Following assumption testing, we also broadened the scope of our work on green public procurement beyond our initial focus on the Indian Railways. Initially our focus on GPP was to prove the concept with one public buyer of steel: the Indian Railways. We chose this sector as it not only has a target to reach net-zero emissions by 2030 but because it has prior efforts to develop a sustainable procurement plan. However, following the national elections in February, we learned that GPP was an immediate priority for the Ministry of Steel and is therefore the critical ministry to work with. As such, we're now focusing on supporting the commitment from the Ministry of Steel to develop a rigorous, evidence-based policy. This is an even greater opportunity to drive systemic change across multiple sectors.

Our mission in action:
Tackling the climate impacts of European aviation

Demand for air travel continues to grow. Without action, the sector could take up to 25 per cent of the global carbon budget by 2050. In 2024 we launched a new programme to tackle aviation's climate impact. By strengthening civil society action and collaboration in this space and educating and engaging more private sector actors, including those critical to financing aviation's transition, we can create the policy and investment environment needed to put the sector on a pathway to net-zero by 2050.

Programme goal: We increase progress towards short and medium term reductions in aviation emissions by scaling investment into e-fuel production, while we change narratives and spur political will that lay the groundwork for policy, technology and investment enablers towards zero emission flight.

Impact highlights

- In 2024, we informed and influenced the investment and lending community on the diversity of "sustainable aviation fuels" (SAFs) and the need to support the highest integrity option among them: e-fuels. This class of SAFs has the greatest potential to meet projected demand for aviation fuels and decrease the sector's climate impact. Investors are key to increasing its supply. The investment sector can use its influence to help accelerate e-fuel availability in the short-medium term, further bringing down the costs of the fuel and its critical components like green hydrogen and renewable electricity. We also engaged a wider audience on investor priorities, commissioning research with market research agency Nfp on the role, barriers and opportunities in working with investors on this topic. Our webinar hosted on the research was attended by energy companies, investors, aviation innovators, and civil society and an evaluation survey indicated that their knowledge on this issue increased as a result.

In 2024 we produced:

- A 'sustainable aviation fuels' explainer with contributions from the UN Principles for Responsible Investment (UN PRI). This reached over 5000 investor members through PRI's membership, the Climate Action 100+ Aviation working group, and more.
- A guide to investor policy advocacy opportunities around SAFs and SAF policy explainers for the US, UK, and EU, which were collectively viewed 3000+ times
- A database of public funding for the development of SAFs and related technologies in Europe.
- A report examining the just transition and environment considerations of SAF with the SASHA Coalition (Opportunity Green).

Broadly, there are two types of so-called 'sustainable aviation fuels' - or SAFs: biofuels (those from biomass feedstocks including crops and waste oils and fats) and e-fuels (made from synthetic, power-based processes). Some 85 per cent of SAF facilities coming online in the next few years rely on waste oils and fats. But we know this type of fuel is highly susceptible to fraud, with environmentally damaging, low-cost plant oils like palm oil being passed off as waste fuels. E-fuels, meanwhile, result in higher emissions reductions and are easier to scale, with renewable energy being the primary input. The highest integrity versions of these fuels are made using green hydrogen (generated from renewable energy) and captured CO2, and can reduce the lifecycle emissions of aviation fuel by around 80 per cent. An aviation system built on renewable energy and hydrogen rather than biofuels will not only reduce emissions in the medium term, but also sets the path to truly zero-emission options, such as hydrogen combustion and electric aircraft.

- In 2024, we ran communications research to identify frames and narratives that resonate with a "movable middle" audience across Europe, with the aim of skilling up European civil society to inject fresh narratives into the debate, challenging industry and creating the social conditions for new policies that would price fossil fuel use in aviation. The dominant narratives being projected by industry today inaccurately position such measures as an issue of social justice — taking away people's right to travel — and focus wholly on technology as the solution. These narratives have ensured business-as-usual, captured policy makers, and disempowered the public. Shifting the public consciousness on this issue is key to creating space for policy change. We ran narrative testing in four key European markets: the UK, France, Germany and Spain. Using innovative reaction-time testing — commissioned through Walnut Unlimited — as well as traditional communications testing, we gathered rich data on the best way to reach audiences on both an emotional and a rational level, and worked with creative media agency, Media Bounty, to develop a creative framework to turn these findings into creative communication campaigns. The research and creative framework will be available open-source to partners from early 2025, aimed at ensuring organisations have the information and skills they need to build effective campaigns on policies that would price the use of fossil fuels in aviation.

In 2024, we were able to make the case for scaling e-fuels to investors by:

- Moderating a panel at Sustainable Aviation Futures Congress — Europe's largest conference on aviation decarbonisation — on the role of energy companies in the fuel project development process and advocating for e-fuels.
- Bringing energy companies, investors, aviation innovators and civil society together to discuss barriers to e-fuel plants reaching final investment decision (FID).
- Presenting to the UN PRI Aviation Working Group on types of SAF and how they differ in terms of sustainability and scalability. Over 20 investors attended.
- Hosting a workshop on e-fuels to Morgan Stanley alongside e-fuel producer Carbon Neutral Fuels.
- Curating an aviation resource list featured on Altiorem, a sustainable finance resource library.

- In 2024, we catalysed action on zero emission flight solutions, bringing together civil society and industry innovators to begin a conversation on this topic. While e-fuels offer our best shot at decreasing aviation's climate impact with existing fleets, zero-emission flight technologies such as hydrogen combustion and electric planes must be the future. But we are woefully off track to launch such technologies at scale. 2025 is a vital opportunity to accelerate progress towards zero emission flight, and that the UK can be a critical testbed for this issue. We need to build a positive coalition, including supportive industry, technological innovators and NGOs to advocate for a clear government strategy to deliver that progress on ZEF. In September 2024, we brought together leading actors in this space to explore potential shared goals, as well as an underpinning vision for this work. We reached consensus that battery-electric and hydrogen ZEF technologies will be necessary for net-zero aviation. We hosted a follow-up workshop in December 2024 focused on how to capture the public narrative on zero emission flight, as a key building block to creating the social and political conditions for the introduction of new measures.

Alongside our narrative testing, in 2024, we built an Aviation Communications Learning Network. The network was identified as a need during our convening held in February 2024, and serves as a space for sharing intel, collaborating and taking part in peer learning events. It aims to increase communications learning and capacity across the European civil society movement, and, further, ensure organisations are equipped to challenge industry narratives and shape the discourse on aviation's climate impact.

- 45+ members
- 2 Skillshare events hosted with external presentations
- 2 Insight Exchanges hosted for peer-to-peer learning
- 1 workshop hosted for collaboration and strategy design.

What we learned in 2024

- We identified energy companies as a vital component of the e-fuels value chain and a key player in the success or failure of the aviation sector's transition. Incumbent oil & gas majors hold significant sway over the e-fuels market, and their lack of engagement is holding back the transition. In 2024, we held a roundtable of energy companies, e-fuel companies, investors and lenders, introducing energy players to e-fuel producers interested in collaboration. Our aim was to break down silos in the value chain. It became clear that there was a critical opportunity to engage with the financial community to apply pressure on energy players to play a catalytic role in the transition. Action from them could dramatically increase investment confidence and mitigate associated technology and price risks. This would help move SAF and new technology projects more quickly to final investment decisions, while speeding up emissions reductions overall.
- We discovered that tapping into existing values — for example justice and health — could help open up a conversation on aviation's climate impact with a broad public audience, creating the social conditions for greater government action. Our focus through our narrative testing was on a "movable middle" audience that represents the majority of the public who are neither climate activists nor deniers, and can be persuaded on climate measures. Using social listening and research we tested broad themes around justice, health, community and innovation with this audience to see how they elicited instinctive and emotional reactions, and to understand if they could influence how receptive these audiences are to government measures on aviation. We examined which narratives made people feel like action should be taken on aviation, and most importantly if that action should be taken by governments. While some of the frames — community and innovation — worked on either an emotional or a rational level, we found those of justice and health were strongest across both measures. This rich data can now be used to support European civil society to better plan their communications journeys on these topics.
- We identified how our aviation programme strategies can support the scaling of long-term solutions. We know that current investment is being pulled away from long-term solutions in favour of supposed growth markets in electric vertical take-off and landing (eVTOL) and bio-based SAF at the expense of zero emission flight solutions that could truly reduce emissions. We also see the same challenges facing the long-term solutions: cost, risk, inaction from the incumbents, the use of false, negative narratives and policy uncertainty. But we see opportunities to drive impact across these intersecting issues: 1) the private and investment sectors will be key to delivering both high-integrity e-fuels and zero emission flight solutions, and 2) there is a clear pathway from e-fuels — using renewable energy and hydrogen — to zero emission fuels such as electric-battery and hydrogen combustion aircraft. Therefore we see a clear need to engage the private sector to include these technologies. Meanwhile, 3) we see a key opportunity to capture the narrative on zero emission flight. Our Aviation Communications Learning Network is a collaborative space to develop a clear, ambitious collective narrative that challenges industry communications and creates the social and political conditions for ambitious policy on zero emission flight.

Cross-programme learning

1 Refining our unique path to impact

This year we refined our value proposition, in light of the first three years of our experience in how our model can unlock collective impact. These changes are captured in our updated theory of change. We see initial investment in network and coalition building and co-designing strategies with partners as the foundation for building ambition and catalysing change at later stages of our programmes. We now have a better understanding of how we can do this in an impactful way. We have also further crystalised the core offering and expertise that we can then bring to a topic. We see research development, strategic communications and narrative change as key tools for our work, and bring these together with our coalition building and strategy design to drive business and investor and policy engagement activities. While each of our programmes utilises these tools differently, we expect to deliver high-impact convenings, research and knowledge products, capacity building, communications strategies, and policy advocacy across all of them in 2025.

2 Network diversity unlocks impact

The diversity of our programme networks is a critical determinant of our ability to secure impact, and we are refining how we manage and utilise varying perspectives within these networks. Both the IGSN and our Aviation Communications Learning Network include a wide range of perspectives on the pathways and policies for decarbonising steel and aviation, respectively. This diversity creates fruitful discussions and new ideas but also poses a risk of standstills or roadblocks. At times, different stakeholders are driven by competing incentives. Balancing the priorities of corporate entities with those of civil society organisations, for example, requires skillful mediation and alignment to ensure all parties remain engaged and the network achieves its overarching goals. We have been managing this tension by balancing network-wide engagement with supporting sub-groups within the networks we host. This helps us to advance specific projects or initiatives while also providing for wider feedback opportunities. While our networks are spaces for learning and discussion, we have also learned how to enable them to effectively drive action and what coordination is needed to make that happen.

3 Shared learning benefits all

We see learning as a core tool for building engagement, strengthening networks, and creating the conditions for effective collective action. Activating peer learning has been an effective way to boost network engagement, facilitating knowledge sharing and increased coordination across our topic areas. The GreenSteel 45 event series offered via the India Green Steel Network and the Skillshares and Insight Exchanges offered by the Aviation Communications Learning Network have both built strong engagement and shared knowledge and insights among stakeholders working towards common goals.

4 Faster routes to programme design

We adapted our programme development process to enable us to build new initiatives and scale our work at speed. Our focus this year has been on building relationships, trust and a new programme in Indonesia. Building on the experience of previous programmes, we adopted an approach which involved first consulting on a shortlist of topics, and then running workshops with a wide range of stakeholders on two specific topics to test our analysis and options for our work. This work was led by our in-country director. This was a more effective process for both building trust in a new geography, and developing innovative strategies. The result has been a broader range of relationships in the initial phase of programme development, and a faster path to co-creation in strategy design. This is what we need to deliver at the speed and impact we intend.

Priorities for 2025

1 Decarbonising heavy industry in Indonesia:

At the start of 2024, we selected Indonesia as the geography for our fourth programme. Indonesia is a strategically important country, which has made significant progress in recent years in integrating climate in their growth and development. We began scoping two programme topics: regenerative nature businesses, and industrial decarbonisation. Our consultations with leaders in both topic areas identified heavy industry decarbonisation as the area of greatest opportunity for our model to unlock impact. Indonesia's significant industrial sector contributes substantially to the nation's carbon footprint. As Indonesia seeks to diversify its economy and create long-term sustainable growth, industrial decarbonisation represents a way to boost green jobs, reduce reliance on fossil fuels, develop new industries and sectors, reduce overall emissions and promote sustainable development. In 2025. we will:

a Create a learning forum for key stakeholders from the private sector and civil society to share and build knowledge on industrial decarbonisation.

b Facilitate collective action on policy advocacy and communications.

c Inform and educate financial institutions on industrial decarbonisation financing.

2 Steel Decarbonisation in India

In 2025, we will:

a Focus on delivering strategic impact through the IGSN and:

b Build an evidence base for the implementation of a rigorous GPP policy.

c Strengthen the financial ecosystem to facilitate steel decarbonisation. This will include sharing transition finance recommendations for scaling public and private investment into low-carbon steel projects in India.

3 Aviation Decarbonisation in Europe

In 2025, we will:

a Continue to work with the private sector and our civil society partners to drive action on high-integrity fuels, and challenge blockers in this space. 2025 is a critical year for laying the groundwork to ensure the successful delivery of European fuel mandates and the achievement of final investment decision (FID) for high-integrity e-fuel plants.

b Work to catalyse significant progress towards zero emission flight by working with leading partners on policy advocacy, investment and strategic communications on the topic.

c **Continue to shift the narrative and shape the conversation around aviation's climate impact in order to create the social and political conditions for greater policy action.** Unhelpful and dominant industry narratives are holding back progress on tackling aviation's climate impact, whether that is policy measures to price fossil fuels into flying or to scale up the development of zero emission flight technologies. As such, shifting the discourse on aviation's climate impact is key to delivering policy ambition on this topic.

4 **Develop a new programme(s), in line with a new organisational goal for 2028. 2024 has been a milestone year in the short journey thus far for Climate Catalyst, with our programmes in India and Europe proving the potential of our trust-based collaborative model, a new programme emerging in Indonesia, and an updated value proposition that captures the recurring elements of our model in these different geographies.**

a Our impact in 2025 will come from the implementation and evolution of our existing programmes and partnerships in these geographies. But alongside this we also aim to identify and take forward a new programme opportunity in 2025, either in one of our existing geographies or through identifying a cross cutting opportunity (e.g. learning networks, trade policy, or a technological solution) that builds on our existing expertise and networks. We will take this forward in service of a new organisational goal for 2028 that we will set in early 2025, following consultation with our partners.

2024 Advisory board

Céline Charveriat (Chair)
CEO of Pro(to)topia

Joojin Kim
Managing Director at Solutions for our Climate, Republic of Korea

Amanda Leland (Vice-chair)
Executive Director at Environmental Defence Fund

Thomas Lingard
Global Head of Sustainability (Environment) at Unilever

Shloka Nath
CEO of the India Climate Collaborative

Dr. Mukund Rajan
Chairperson at ECube Investment Advisors

2024 Strategic Council

Sharan Burrow
Former Secretary General, International Trade Union Congress (ITUC)

Anirban Ghosh
Head – Centre of Sustainability, Mahindra University

Pok Wei Heng
Climate Justice Design Partner, World Economic Forum

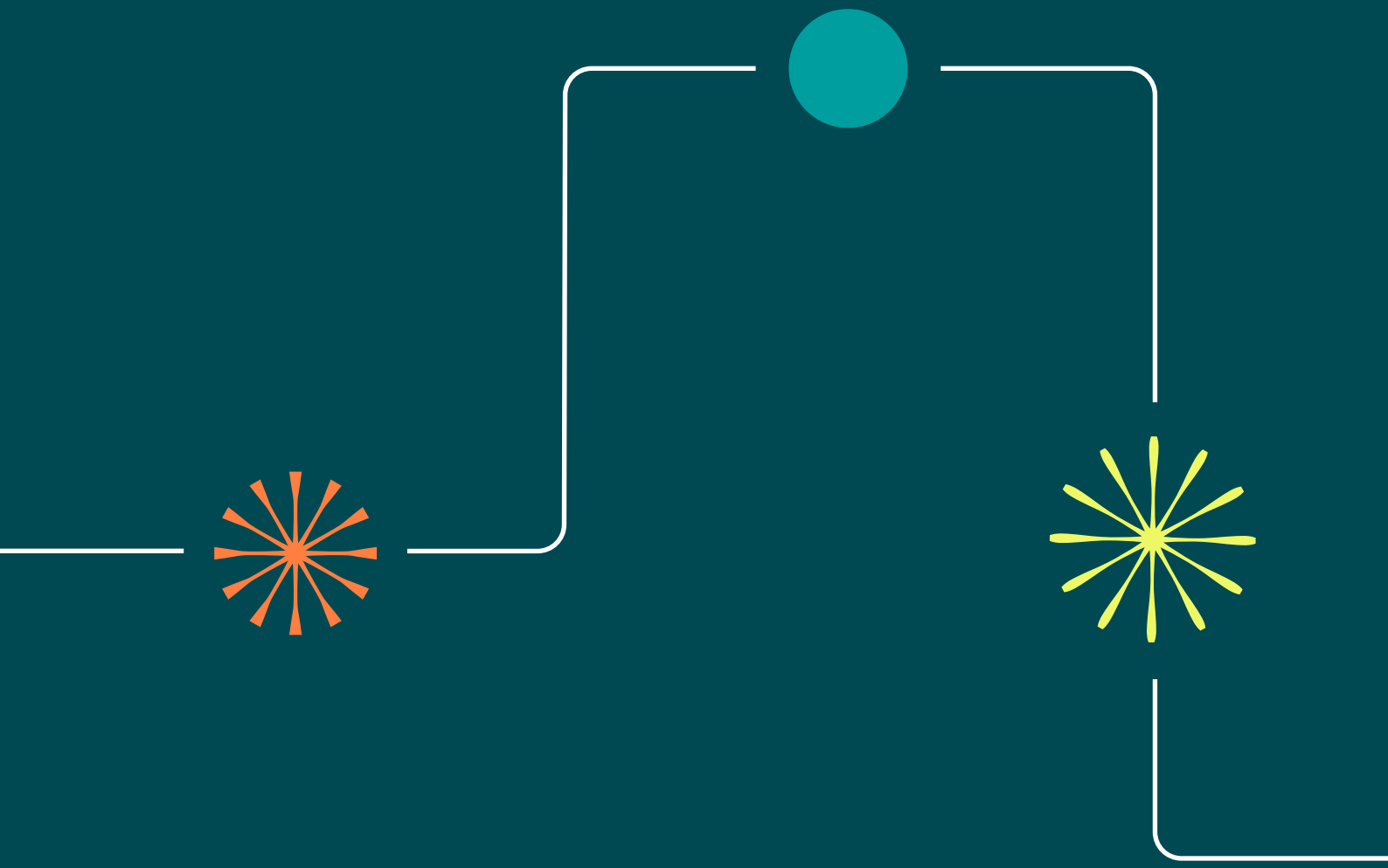
Bernice Lee
Hoffman Distinguished Fellow, Chatham House

Fiona Reynolds
Independent director and advisory board member for Environmental, social, and governance (ESG) investing

Matt Rogers
Investor and Philanthropist

Anote Tong
Former President of Kiribati

Nathaniel Keohane
President, Center for Climate and Energy Solutions (C2ES)



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