

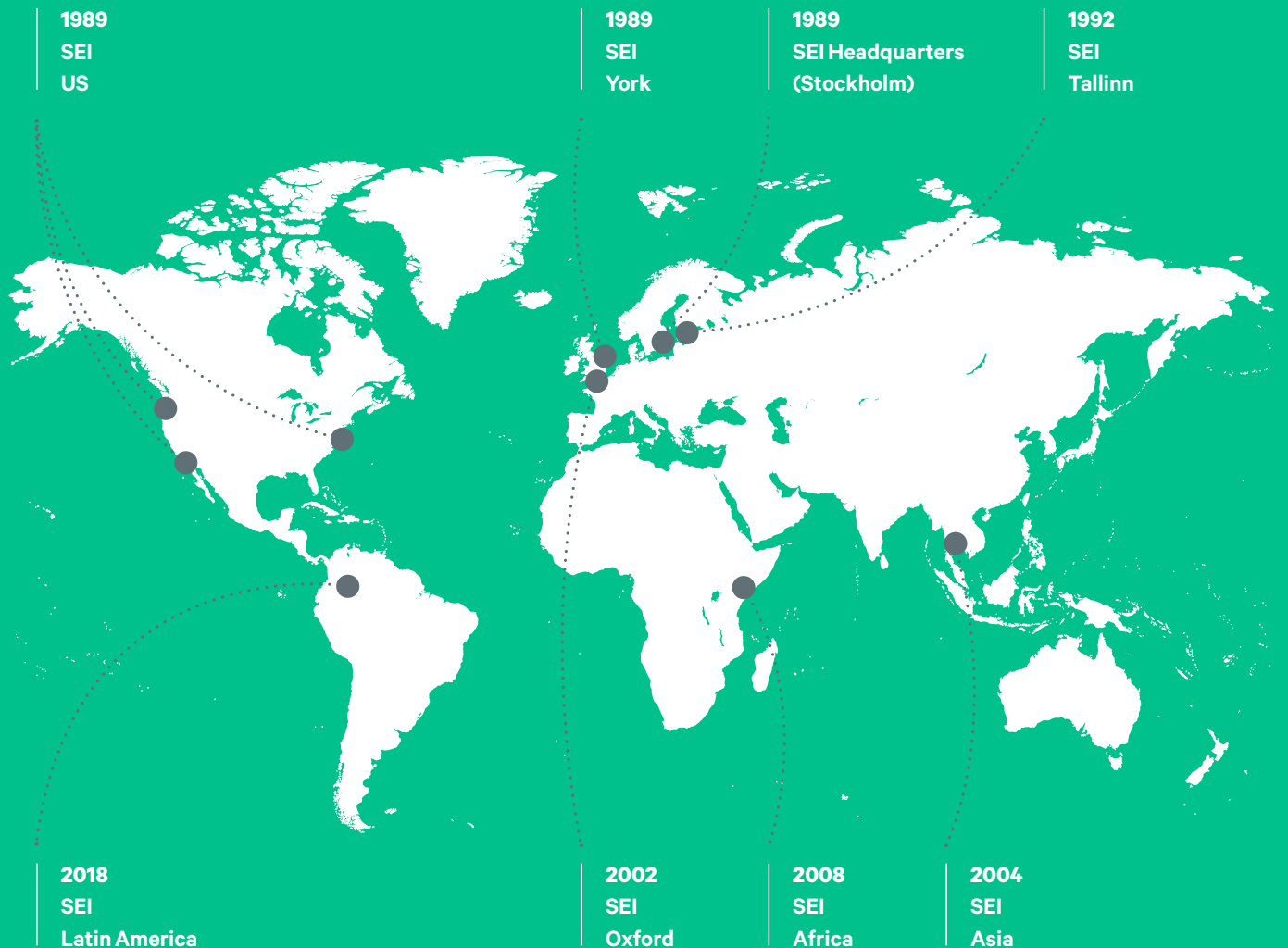


Action and accountability

Annual report 2021

Our centres: working and learning in partnership

SEI was an early mover in establishing regional centres around the world. Initially, SEI was located in Sweden, the UK and the US. Our centres ground us in local and regional realities and ensure we are responding to the right agendas and creating opportunities for long-term engagement. We build capacity by prioritizing local and regional staffing in all positions. Our aim is to add value to regional policy discourse and to be a trusted regional partner.



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A person wearing a patterned dress is holding a solar panel in a forest. The background is a dense forest with many trees and green foliage. The entire image has a green tint.

**The Stockholm Environment
Institute is an international
non-profit research and
policy organization that
tackles environment and
development challenges.**



Leadership perspective

An introduction from the Executive Director

Despite the entire year being overshadowed and severely impacted by the pandemic, restricting our ability to meet, use the office, travel and do field work, SEI's research and engagement work around the world has carried on at full speed.

Needs and demands keep growing for SEI's unique offer: usable science-based knowledge for changing agendas, building capacity and improving decisions for sustainable change around the world.

At the end of the 2021, we numbered approximately 320 employees worldwide, a 15% increase in one year. This growth comes with some challenges. In particular, when new colleagues have often not been able to meet, we must invest in SEI's culture, identity and principles of work and promote and develop these together.

Partly in response to the growth in 2021, we reorganized our headquarters in Stockholm and created 11 research and engagement teams under three new divisions. The new structure prepares us for additional growth, clarifies our niches in sustainable development and allows us to better capture coming opportunities while nurturing team spirit and innovation.

A landmark in 2021 was COP26, the UN climate change conference in Glasgow. One could have wished for more stringent outcomes and ambitious pledges, but one should also consider the outcomes in light of how trajectories for emissions and temperature increases have shifted since 2015. It could be viewed as a major improvement in the outlook for our common future, which happened in the context

of deteriorating international relations and mounting geopolitical tensions. SEI made many contributions to COP26, including advancing “adaptation without borders” and on loss and damage, industry transitions, climate resilience in Africa, methane, and oil and gas transitions. In addition, new editions of the Carbon Inequality Era and Production Gap Reports received major attention and uptake in conjunction with COP26 (read the feature on our climate work on page 8).

In 2021, we used the [SDG Synergies](#) tool to support the Swedish government to assess synergies and trade-offs in the national implementation of the 2030 Agenda. The tool was launched after several years of development and pilot testing around the world. In a collaboration with the steel industry, we concluded the 2030 Agenda Compass project, which developed a participatory process and software to assess strategies and interventions aimed at achieving the SDGs.

In Kenya, we deepened our environmental diplomacy engagement. SEI Africa supported the Government of Kenya with the publication of *Science, Research and Innovation for Harnessing the Blue Economy*. The book was [launched at a high-level Side Event on Blue Economy](#) that was co-hosted by Kenya, Canada, Japan and Portugal in New York alongside Kenya's Presidency of the UN Security Council in October 2021. We continue to build efforts on ocean policies with an eye towards and beyond the [2022 UN Ocean Conference](#) to be co-hosted by Kenya and Portugal in Lisbon.

SEI research changed how courts in the US and the Netherlands have addressed fossil fuel production, using well-established economic theory to counter arguments made by fossil fuel interests and show how increased production does in fact lead to increased use and carbon emissions, and that avoided production is not automatically replaced elsewhere (read the full story on page 34).

At the same time, community-level work continued, although many times travel restrictions stood in the way of fieldwork. In collaboration with a rural off-grid community in Machakos County, Kenya, our researchers facilitated the co-design of a 10-year road map towards

electrically powered cooking – a detailed plan articulating the community’s vision of the energy transition, and their role in the process, using backcasting. Six months on, the community members had begun to implement actions described in the plan (read the full story on page 42).

In Southeast Asia, SEI helped to set up Myanmar’s first river basin organization. Our three-year assessment (halted by the military coup in early 2020) helped build supportive institutions for water management, leading to the establishment of the Chindwin River Basin Organization.

In 2022, we look forward to working with the recently renewed Board of Directors, including its new Chair Isabella Lövin, Sweden’s former Minister for the Environment and Climate and Deputy Prime Minister. And we are excited to be contributing to the Stockholm+50 Conference, which commemorates the 1972 United Nations Conference on the Human Environment in Stockholm. On 2–3 June 2022, the city will welcome the world to the UN meeting [Stockholm+50: A Healthy Planet for the Prosperity of All – Our Responsibility, Our Opportunity](#) to take stock and accelerate action.

SEI has a special connection to the 1972 conference – in fact, the institute derives its name from it. The principles of the Stockholm Declaration, recognizing the centrality of the environment for human well-being and the interconnection between the environment and development, lie at the heart of our mission and mandate. Among other things, we are preparing a major scientific report to support debate and discussion at Stockholm+50.

In 2022 we will also be at the midpoint of SEI’s [2020–24 Strategy](#). This is an opportunity to reflect,



Måns Nilsson
Executive Director

Demand keeps growing for SEI’s offer: usable science-based knowledge for changing agendas, building capacity and improving decisions for sustainable change.

review achievements and lessons learned and make changes for the remainder of the strategy period, as well as look ahead to a new strategy phase.

On page 50, you can read more about how last year our strategy delivered change.

As 2022 begins, the world is coming to terms with the terrible events unfolding in Ukraine. We will review our operations to see how we as an organization might support those affected. Over the coming months we will have to review how the new security crisis will affect the international context of our work, and how we adapt and adjust our strategy and engagement to remain effective. We must also pay attention to the health, safety and well-being of colleagues across the organization.

What is certain is that the principles in which our work is rooted – the principles voiced in the Stockholm Declaration – are now more important than ever. And we must continue to stand up for them and the work of delivering on them.

Action and accountability on climate

COP26 in Glasgow was billed by COP President Alok Sharma as “the last best chance to keep 1.5 degrees alive”. While the outcomes fell short of what was hoped for, especially on coal, there were many positives. SEI made an impact not only at COP, but throughout the rest of 2021, providing solutions, knowledge and ideas for climate action and climate accountability. Below are just some of the highlights.

Global Methane Pledge

A vital outcome in Glasgow was the [Global Methane Pledge](#). With the UN Environment Programme and the Climate and Clean Air Coalition, SEI co-authored the [Global Methane Assessment](#) released in May 2021.

The report provided the evidence base for the Global Methane Pledge launched by the EU and the US at COP26. The Assessment highlighted that a 45% reduction in global methane emissions by 2030 is the most cost-effective way to limit global temperature increases in the near term.

The Pledge commits countries to reduce methane emissions by 30% compared with 2020 levels, by 2030. So far, 108 countries have signed up to the Pledge. Read the full story on page 36.

Trailblazing climate lawsuit draws on SEI research

In May, the District Court of the Hague ruled that Shell must cut its carbon dioxide emissions by 45%. This was the world’s first ruling to hold an oil company liable for climate change. The judgement relied on data from the [Production Gap Report](#) and SEI provided further evidence to the case that corrected arguments made in a Shell-commissioned report. Read the full story on page 34.

Delivering on climate commitments

Last year, SEI continued its pioneering work on helping countries deliver on their climate commitments under the 2015 Paris Agreement (so-called Nationally Determined Contributions, or NDCs) and advance their climate ambitions. It has been clear for some time that commitments often fell short of what was required to hold temperature rise to 1.5°C.

Ahead of COP26, SEI worked with 15 countries to assess the impact of policies and measures on their efforts to cut emissions, and to understand the other benefits doing so can have, such as improving health outcomes by cutting air pollution. In workshops with local experts, SEI helped co-develop datasets and drive-up capacity, meaning that countries such as Chile and Colombia could ramp up their climate targets and expand the scope and ambition of their NDCs. Read the full story on page 40.

Glasgow Breakthrough Agenda

One of the successes of COP26 was the [Glasgow Breakthrough Agenda](#), which commits countries to work together to make clean technologies the most affordable and accessible option for sectors with high greenhouse gas emissions, like steel, cement and construction. The SEI-hosted initiative Leadership Group for Industry

Transition (LeadIT) helped make the agenda a success through its work on green public procurement (GPP). In 2021, the team worked with countries, companies and intergovernmental organizations to work out how to harness GPP to drive clean and green transitions in high-emitting sectors, co-authoring a report on GPP that led to the establishment of the Industry Deep Decarbonisation Initiative of the Clean Energy Ministerial (IDDI), a forum of 29 countries promoting GPP in driving industry transitions.

At COP, IDDI was complemented by the US-launched First Movers Coalition, a procurement initiative aimed at companies. Many companies in the LeadIT coalition sign up and LeadIT, IDDI and the First Movers Coalition are all cited in the Glasgow Breakthrough Agenda as key initiatives in the effort to deliver on its goals.

New thinking on climate adaptation

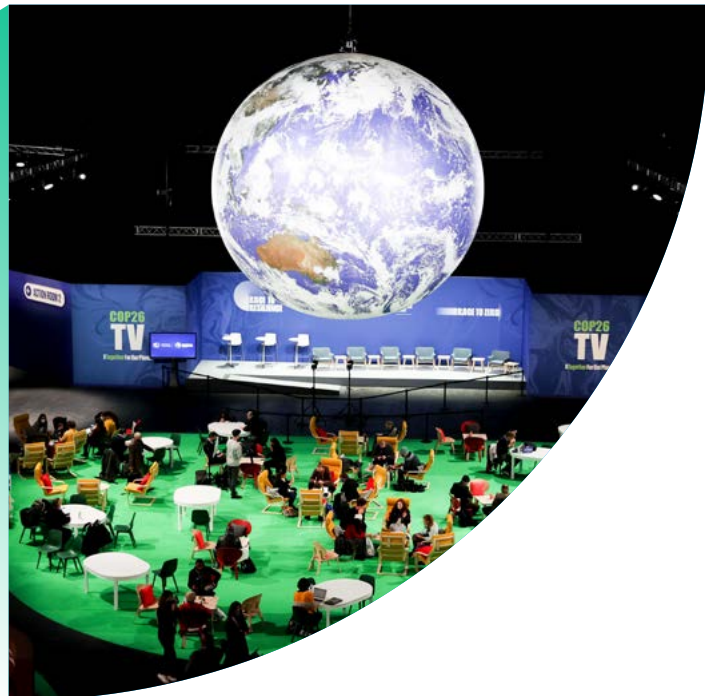
Because the world is increasingly connected, climate adaptation is increasingly a global challenge. Climate impacts – and responses to those impacts – happening in one location can affect people and economies in very different places, in other countries and continents. Because of this, it is vital that adaptation action is also coordinated across borders to tackle so-called “transboundary climate risk”. The Adaptation Without Borders initiative was created in 2019 to inspire action and influence policy to achieve this aim.

The EU Adaptation Strategy was adopted in February 2021 and its section on international action and cooperation on adaptation includes explicit reference to transboundary climate risk. Liviu Stirbat, Deputy Head of Adaptation in the EU Directorate General for Climate, recognized this as “a very good example of SEI influence on the policy agenda.” At COP26, Frans Timmermans, the European Commission’s Executive Vice President for the European Green Deal, announced DG CLIMA as the first institutional supporter of Adaptation Without Borders. Interest in the issue has recently grown in the Nordic region and become a cross-cutting topic for the Swedish Expert Council on Adaptation, for which SEI acts as an advisor.

Progress on loss and damage

Tangible progress on finance for climate “loss and damage” was a top priority for many developing countries at COP26. SEI presented key findings and recommendations from its research to civil society groups at two consultations convened by the Climate Action Network. This inspired these groups to draft an open letter, signed by more than 300 civil society organizations, with proposed actions for how COP26 could deliver on loss and damage finance. The letter cited SEI’s recommendations and reached key audiences in international climate policy.

The findings were shared with COP26 President Alok Sharma, heads of states, ministers, and heads



of delegations, including loss and damage negotiators from the Alliance for Small Island States, G77 and China, the African Group and the EU. The financial mechanism for loss and damage in SEI's [briefing paper](#) was directly reflected in the proposal for the Glasgow Loss and Damage Finance Facility, tabled by G77 and China.

Net zero: realism and accountability

Science is clear that we must achieve global net-zero emissions by 2050. Yet there is much to be done to make it a reality. SEI is represented on the Expert Peer Review Group of the UN-backed global Race to Zero Campaign, and here and elsewhere SEI has been setting out [principles](#) and ideas for ensuring that net-zero, targets are meaningful, [viable](#) and robust, and that those making pledges are accountable for them. These perspectives informed the [report](#) of the World Bank Carbon Pricing Leadership Coalition and discussions in the [Climate Neutrality Forum](#).

Soy Manifesto – action on deforestation

During COP26, UK industry leaders from 27 major businesses united in signing the [UK Soy Manifesto](#) on 9 November. The Manifesto commits them to cutting deforestation and habitat destruction out of UK soy supply chains as soon as possible, and by 2025 at the latest. SEI was part of the team behind

the Manifesto, providing expertise on measuring and monitoring deforestation risk in supply chains and helping to develop the concept for the monitoring, reporting and verification system that will help ensure that industry commitments to the Manifesto are turned into effective action.

Beyond Oil and Gas Alliance

Also at COP26, 11 national and subnational governments launched the [Beyond Oil and Gas Alliance](#). The new global alliance, spearheaded by Denmark and Costa Rica, will seek a managed phase-out of oil and gas production to align with Paris Agreement goals. The Alliance points to the SEI and UN Environment Programme report, [The Production Gap](#), as a key part of its evidence base.

Better climate diplomacy

When the climate talks came to a standstill in 2020, forcing diplomacy to move online, a new question arose: could a digital transition serve as a “positive disruption”, a catalyst to transform for the better the United Nations Framework Convention on Climate Change process? In a [report](#) published last year, SEI examined how UNFCCC activities could be moved online in ways that make them more effective, inclusive and transparent – and what problems may arise with such a transition.

(Below) Delegates attend the Exploring Loss and Damage event at COP26.



Centre in focus – SEI Africa

Africa is facing many economic, social and environmental challenges, especially from rapid urbanization, water scarcity and lack of access to sanitation and energy. Three staff at SEI Africa discuss what they are doing to address these issues and what inspires them in their work.

What brought you to SEI Africa?

Cassilde Muhoza, Research Fellow: I came across SEI in July 2014 when I was looking for an opportunity to work at research institute on urban sustainability issues in Africa. I grew up in sub-Saharan Africa witnessing the negative impacts of unplanned rapid urbanization on residents' health and well-being in cities, including increasing urban poverty and the proliferation of informal settlements, lack of access to basic services and infrastructure, and environmental pollution and associated health effects. I desired to work on sustainable urban planning and urban issues in Africa so that, through my research, I can inform and contribute to change towards sustainable, liveable and inclusive cities. SEI is well known for its reputation and expertise in tackling environment and development challenges around the world. When SEI Africa was developing its Sustainable Urbanization Programme in 2014, I was privileged and excited to join the centre to contribute to the programme and to SEI's mission to support decision-making for a sustainable future for all.

What inspires you in your work?

What inspires me the most in my work is the desire to bring about change in Africa so that people can live decent lives in healthy and sustainable urban and rural areas. It is disheartening to see the majority of the population living in extreme poverty without access to clean water and sanitation services or electricity and exposed to urban air pollution.

SEI's work contributes immensely to decisions for more sustainable development in Africa and working with talented and motivated researchers across all SEI centres inspires me a lot. I look forward to going to the office because I work with passionate and kind colleagues at our centre who are equally driven by the desire to contribute to eradicating poverty and inequality and a better future for Africa. It is rewarding to see some of our work lead to change on the ground, such as the development of policies that will transform lives.

My work is inspiring because I get the chance to engage with stakeholders from different countries across the continent. I particularly enjoy working with and learning from vulnerable and marginalized



Cassilde Muhoza at the SEI Science Forum in 2019 (middle).

communities in urban and rural areas to address environmental and development issues.

What are the key challenges you see for the region in the coming five years?

A key challenge for sub-Saharan Africa is tackling rapid urbanization and related increasing unemployment and poverty. Most of the urban population growth is expected to take place in small and medium-sized cities where local authorities do not have adequate capacity and resources to effectively plan for sustainable urbanization. Other challenges include addressing environmental degradation such as air, water and soil pollution and biodiversity loss and associated health impacts, resulting from unsustainable urban development pathways, as well as building the resilience of cities. Enhancing the capacity of local authorities and improving urban governance will be key to achieving inclusive, sustainable and resilient cities and communities. SEI has been working with decision-makers and policymakers in East African cities to support sustainable urban planning and development by generating knowledge, building capacity and engaging with decision makers. Together with our partners, we have been working with Nairobi City County authorities, including the Nairobi City County Government, Nairobi City County Assembly and Nairobi Metropolitan Services, to develop policy instruments for air quality management informed by scientific assessments and monitoring of air pollution. SEI has also conducted training for Nairobi City

County Government officials and sensitization workshops for Nairobi City County Assembly parliamentarians to review the draft legal and policy instruments on air quality.

What brought you to SEI Africa?

Romanus Otieno Opiyo, Research Fellow: I came to know about SEI in 2017 when I was invited to participate in the British Academy-funded project Implementing Creative Methodological Innovations for Inclusive Sustainable Transport Planning (i-CMiiST). As a trained urban planner, lecturer and researcher, I was impressed and fascinated with the kind of work SEI was doing. A research fellow vacancy in late 2018 gave me an opportunity to apply and I was pleasantly surprised when my wish to join SEI was realized in January 2019. January 2022 marks my third anniversary at SEI.

I was attracted to SEI by the following opportunities: a rich network of multidisciplinary researchers across SEI centres; creative and participatory methodologies and approaches; bridging science and policy in environmental and development spheres; and close working relationships with universities and research-oriented organizations and community.

I have realized some of my goals, with the hallmark being networking with SEI researchers in different centres during the Science Forum event in 2019 that was hosted at SEI Africa. Though Covid-19 has slowed down activities, I am still optimistic about fulfilling my research policy agenda shaping Africa urban spaces.

What inspires you in your work?

Joining SEI from a public university environment, what most inspires me is the multidisciplinary approach embraced in most SEI projects, which really helps me to appreciate the different research perspectives used in examining and analysing issues. These research dynamics make it interesting and rich. I am also inspired by the quality of data and confidence users have in SEI research outputs, both decision makers as well the wider community, especially through citizen science. They are able to own the outputs and feel like a part of the exercise.

The collegial environment and team spirit at SEI is inspirational and this provides good professional interactions between junior and senior researchers, which is a good platform for learning and experience sharing and a critical foundation for innovations.

What are the key challenges you see for the region in the coming five years?

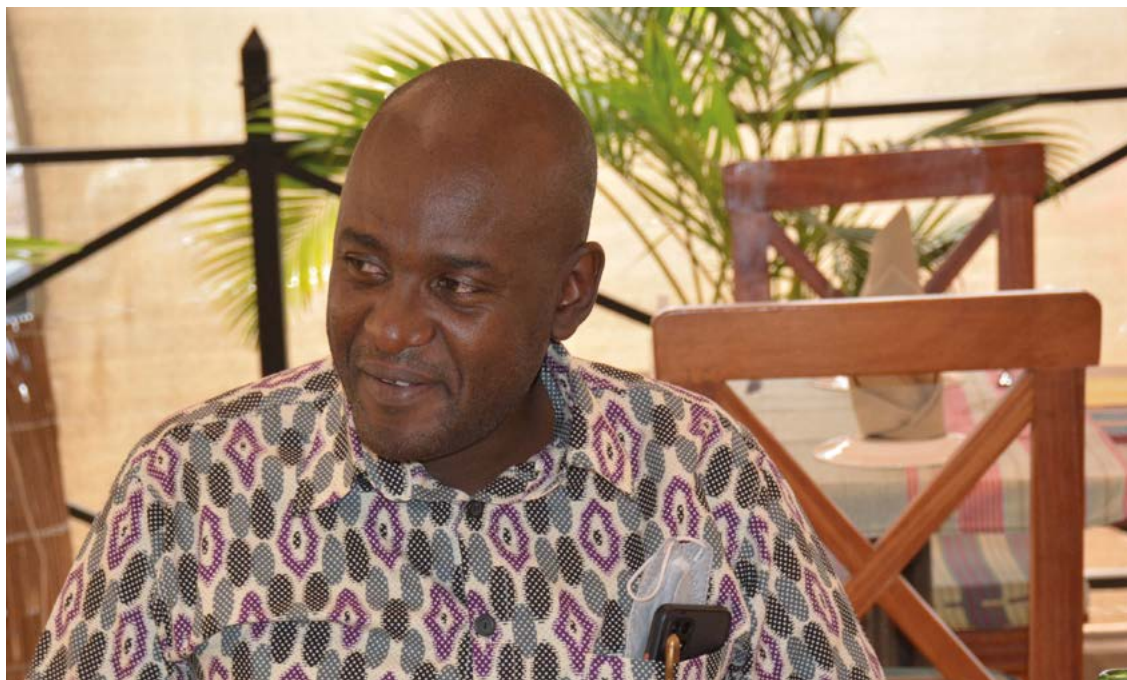
Africa is facing rapid urbanization and depending how this is handled, this may define future environmental and development challenges affecting the continent beyond urban Africa. Several key challenges associated to this involve the health and welfare of citizens. Climate risks and risks to food security, including from rising sea levels and droughts, are growing. There are pressing issues around inequality and social stability,

due to access to resources and opportunities. It is also vital to address governance and rights issues affecting the vulnerable members of the society like low-income earners, people living with disabilities, the elderly and children. We must also pay attention to issues around the “youth bulge” and urban security due to dwindling employment opportunities.

What brought you to SEI Africa?

Jacqueline Senyagwa, Research Fellow: My career started with two non-governmental organizations in Tanzania. One job was concentrating on policy advocacy, while the other implemented development interventions with a focus on influencing policies in the education sector. In both organizations I had the opportunity to implement activities and report back through project reports and popular publications, but not to conduct research and inform policies through research-based evidence. SEI seemed like the perfect organization that offered that kind of environment. This has been my long pursuit: to connect my work to policies and make meaningful contributions towards informed policies that respond to people’s needs. It does not come easy of course. And even in the scenario where evidence is so clearly communicated, uptake may still be minimal, thus pushing researchers to look beyond generating the evidence into many other interconnected challenges associated with policy uptake, making my work even more interesting.

Romanus Otieno Opiyo at a staff gathering in Nairobi, 2022.



What inspires you in your work?

When I started working with SEI Africa, it was a small centre, with only four people working in the areas of natural resources management, energy and sanitation. The work I have been involved in SEI Africa looks at responding to community challenges – in other words, it is demand-driven research that seeks to contribute to solving community challenges and bring desired changes. It addresses real-life issues and works with the communities to address them.

A connection to dynamic research and people that have a great passion for the continent makes me always look forward to collaborating with colleagues to inspire positive change in the region.

SEI's work gives the room to ask the hard questions and pursue the answers that many would prefer stay under the table. Are we there yet? Do we have the answers to the many unasked questions? Not yet! A continuous process of self-reflection on our intervention and the collective efforts we put in together with research partners and respective stakeholders is a great advantage that SEI Africa enjoys.

What are the key challenges you see for the region in the coming five years?

Most communities in Africa still lack the basic social services to meet their day-to-day basic needs. The continent has struggled with attaining a decent standard of living for its inhabitants for many decades, but only very slow progress has been realized. New thinking and innovative ways are needed to harness the continent's resources and convey the long-awaited effects. Despite the many challenges facing Africa, if I were to place a priority on two key challenges to address, I would pick water and energy – not to undermine other areas of development, but I believe these two sectors are widely linked to many other sectors of importance to Africa's well-being.

Water resources management is one of the key challenges in the region. The demand for water resources to support economic growth in sectors



Jacqueline Senyagwa at a workshop in Asutifi, Ghana, in 2019.

such as agriculture is ever-growing due to population growth and associated demand. The continent needs to move in the direction of attaining water efficiency under growing population pressure in order to meet social demands, support ecological needs and economic growth.

Meeting energy needs for the African population is also a lofty goal and surrounded by complex dynamics, but it also means there is a greater obligation to direct research efforts towards such sectors and create a contextualized path to answer the region's energy requirements.

For many years, SEI Africa has worked in these two sectors at various levels – community, national and regional – to influence positive change. Continuous efforts in these sectors will contribute to addressing many challenges in the region and it aligns with the Swahili saying *Haba na haba hujaza kibaba*, meaning “little by little fills the pot”.



SEI in 2021

Highlights in research, policy and engagement

Cricket cakes and grasshopper delight: new African cookbooks showcase recipes with insects

Two new cookbooks integrating traditional African culinary practices into contemporary recipes that feature insects were launched as part of a project with AgriFoSe2030 and partners to expand markets for cultivated insects in southern Africa and capitalize on a growing interest in insects as a “climate-smart” protein source worldwide. www.sei.org/featured/african-cookbooks-show-how-to-cook-with-insects

2021

February



Environmental issues in Europe – sharing lessons learned

SEI supports Bosnia and Herzegovina in collaboratively developing the BiH Environmental Strategy and Action Plan 2030+ (BiH ESAP 2030+). A webinar series covered eight important EU areas of environmental protection: water resources, waste management, biodiversity and nature protection, air quality, climate and energy, chemical safety, noise, resource management and environmental management. www.sei.org/featured/environmental-issues-in-europe-sharing-lessons-learned

March

In memoriam: Roger Kasperson (1938–2021)

SEI learned of the passing of Roger Kasperson, who served as executive director from 1999 to 2004. A world authority on risk communication and analysis, his work addressed many issues related to global environmental change and helped guide SEI on the path of scientific excellence and policy relevance. www.sei.org/featured/in-memoriam-roger-kasperson-1938-2021



Asia Pacific Youth Forum on Disaster Risk Reduction and Climate Crisis 2021

The youth forum was part of the 9th Asia Pacific Ministerial Conference on Disaster Risk Reduction 2022. Every year, millions of children and youth are affected by natural hazards and human-induced disasters. The inputs and recommendations for policymakers from the forum will be used as an advocacy document. www.sei.org/events/asia-pacific-youth-forum-on-disaster-risk-reduction-and-climate-crisis-2021

April

SEI researcher testifies at US congressional hearing on fossil fuel subsidies

SEI's Peter Erickson testified at a US congressional hearing on fossil fuel subsidies on research he conducted with Ploy Achakulwisut. Erickson focused on three points: fossil fuel subsidies inefficiently support economic activity, undermine efforts to deal with climate change and work against improvements in public health. www.sei.org/featured/fossil-fuel-subsidies-hearing

New Green Steel Tracker gathers information about low-carbon steel investments

The Leadership Group for Industry Transition (LeadIT) launched a Green Steel Tracker to gather information about low-carbon steel investments in the steel industry and present them transparently in one place, presenting a clearer picture of future steel production, with the aim of the data informing better decision making. www.sei.org/featured/green-steel-tracker



Resilience and management of Arctic wetlands: key findings and recommendations

Effective stewardship of Arctic wetlands, including conservation and restoration efforts, has enormous potential to buy the world time by contributing to climate mitigation and adaptation. A 2021 circumpolar report and recommendations adopted by the Arctic Council Ministerial in Reykjavik, Iceland, highlight the importance of Arctic wetlands and identifies actions to strengthen the conservation and restoration of wetlands. This report presents 13 key findings for Arctic wetlands and policy recommendations for six themes, from climate mitigation and national governance to building knowledge for wetlands management. www.sei.org/publications/arctic-wetlands-key-findings

Effective stewardship of Arctic wetlands has enormous potential to buy the world time by contributing to climate mitigation and adaptation.

Parliamentarians draw on science to develop air quality management policies for Nairobi

SEI co-organized sensitization workshops for parliamentarians working with Nairobi City County authorities to review draft air quality legal and policy instruments. They were joined by representatives of technical institutions, national transport and energy sector agencies and local academics. Engagement is part of SEI's efforts to advance science-policy dialogue. www.sei.org/featured/parliamentarians-science-air-quality-management-frameworks-nairobi

May

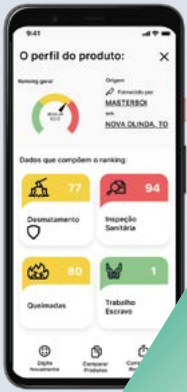
Industry transition: demand-side policies to create lead markets

This high-level panel discussion focused on why industry transition is a high priority and how demand-side action is a critical element in accelerating decarbonization. The event, co-organized by LeadIT and part of the of the 12th Petersberg Climate Dialogue, also brought together key stakeholders to address questions on emerging tipping points for heavy industry sectors. www.sei.org/events/industry-transition-petersberg-climate-dialogue-satellite-event

June

Introducing the new Adaptation at Altitude Solutions Portal

Adaptation at Altitude launched a portal that provides a way to find information about climate change adaptation measures specifically tailored for mountain regions worldwide. It offers access to a database that brings together comprehensive in-depth knowledge on both planned and implemented measures to help mountain regions adapt to climate change. www.sei.org/featured/introducing-the-new-adaptation-at-altitude-solutions-portal



Trase launches beef app to empower consumers in Brazil

Trase launched a smartphone app that informs Brazilian supermarket customers about the environmental and social performance of the meat products they purchase. *Do Pasto ao Prato*, or “From Pasture to Plate”, aims to address one of the biggest challenges in the food sector: the lack of transparency in food supply chains. www.sei.org/featured/trase-launches-beef-app-to-empower-consumers

“Disaster justice” and climate planning in cities in Asia

SEI Asia’s new podcast series “Environment and policy in Asia” explored how Asian cities can approach urban climate governance for the poorest and most vulnerable, and invited an indigenous activist and policymaker from the Philippines to discuss the connections between gender equity, poverty and sustainability. www.sei.org/featured/disaster-justice-and-climate-planning-in-cities-in-asia

New database aims to help build the future of clean household energy policy

SEI researchers developed the Household Energy Policy Repository to promote increased access to clean fuels and technologies for household cooking, heating and lighting. The main objective is to provide policymakers and advocates with a simple source of information to compare their own existing policies and support the development of new ones. www.sei.org/featured/new-database-build-future-clean-household-energy-policy

UN Food Systems Summit

SIANI organized the Agri4D conference after the summit, bringing together researchers, policymakers and practitioners to engage with the challenges of food systems, focusing on low-income contexts in a globalized world. SEI Asia also held an independent dialogue, Food Stories: Scalable Solutions for Food Security, ahead of the summit in July. www.sei.org/perspectives/the-right-to-food-a-global-cry-for-urgent-action-towards-sustainable-food-systems

The Production Gap Report 2021

The third edition of the Production Gap Report revealed that governments' plans for fossil fuel production remain outside of pledges within the Paris Agreement's global warming limits. Governments plan to produce more than double the amount of fossil fuels in 2030 than would be consistent with limiting global warming to 1.5°C. www.sei.org/publications/the-production-gap-report-2021

Since 2018, SEI Asia has supported the annual ASEAN-China Environmental Cooperation Forum, a key interregional platform for policy dialogue.

October

Science and research key for a sustainable blue economy

Kenya co-hosted a high-level blue economy side event in New York that served as the official book launch of *Science, Research and Innovation for Harnessing the Blue Economy*, which covers part of the 2018 Sustainable Blue Economy Conference. SEI Africa Centre Director Philip Osano was a member of the book's editorial committee. www.sei.org/about-sei/press-room/science-and-research-key-for-a-sustainable-blue-economy

China-ASEAN Environmental Cooperation Forum 2021 (CAECF)

To foster cooperation between ASEAN and China, SEI Asia has since 2018 supported the annual ASEAN-China Environmental Cooperation Forum (CAECF). CAECF is a key interregional platform to facilitate policy dialogue and knowledge exchange between ASEAN and China. CAECF is held annually by the China-ASEAN Environmental Cooperation Centre under China's Foreign Environmental Cooperation Centre of the Ministry of Ecology and Environment.

Through the Strategic Collaborative Fund Phase 2, SEI provides financial and technical support to CAECF. The platform enables two-way learning for China and ASEAN countries to better understand regional environmental challenges and seek innovative solutions. www.sei.org/projects-and-tools/projects/strategic-collaborative-fund-phase-2/#past-events

UK Soy Manifesto

UK industry leaders from 27 major businesses signed the UK Soy Manifesto that commits them to cutting deforestation and habitat destruction out of UK soy supply chains as soon as possible, and by 2025 at the latest. SEI will work with the companies to improve understanding of supply chains. www.sei.org/about-sei/press-room/uk-soy-manifesto



November



Isabella Lövin – new chair of SEI

The Government of Sweden appointed Isabella Lövin, former minister for climate and the environment and former deputy prime minister of Sweden, as the new chairperson of SEI's board, with international and national policy experience at the very highest level on climate change, as well as development cooperation and EU politics. www.sei.org/featured/isabella-lovin-new-chair-of-sei

RESPONSE project

SEI Tallinn led the RESPONSE project to focus on finding ways to increase the mobility and well-being of people through building the capacities of public transport authorities and public sector coordinators in the Baltic Sea region and supporting more accessible and climate-friendly demand-responsive transportation (DRT). SEI conducted a mapping study of business models and targeted barrier-enabler analysis for policymakers. The study presented an overview of DRT experiences in 12 countries and benchmarked them to service models operating within the Baltic Sea Region. www.sei.org/projects-and-tools/projects/response-eng

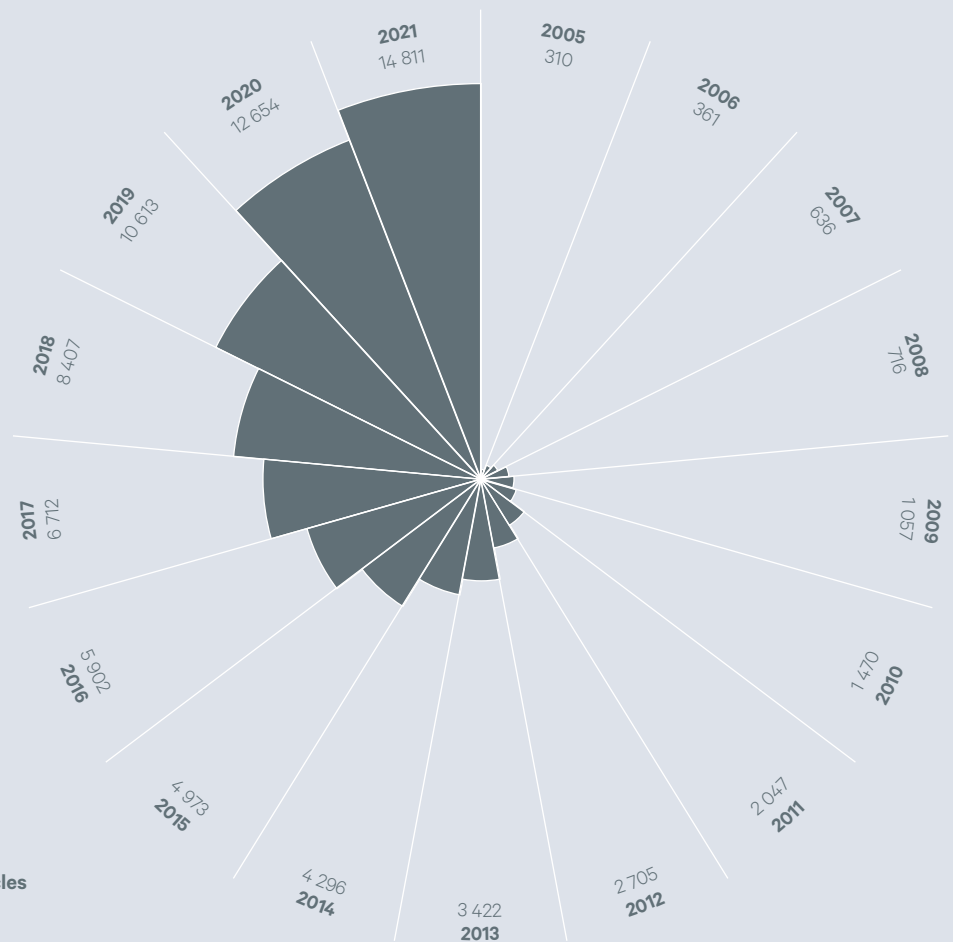
December



Scientific impact in 2021

High-quality research underpins our mission to bridge science and policy and 2021 showed our performance in top scientific journals exceed the previous year. Last year, our researchers published more than 155 peer-reviewed articles and our citation rate increased substantially compared with 2020 from 12 654 to 14 811.

Below is a selection of 10 of our most impactful and significant journal articles published in 2021. The selection was made based on a combination of how often the papers have been cited, their Altmetric attention score and the impact factor of the journal in which they were published.



Citations of peer-reviewed articles
with SEI authors, 2005–2021.

Source: *Web of Science*.



On ethical choices in countries' climate plans

Under the Paris Agreement, the climate plans countries put forward are to be “fair and ambitious”. This paper evaluates a selection of recent effort-sharing studies to determine whether they are explicit about the ethical choices underlying their analysis. Reviewing studies that quantify equitable effort sharing between 16 countries under the Paris Agreement, the authors find that nearly two thirds (10 studies) present themselves as neutral or value-free, despite being limited to a small and biased subset of ethical perspectives on effort-sharing that tend to favour wealthier countries.

In particular, “grandfathering” of emissions, where countries argue that their status as high emitters justifies continued high emissions, should not be included in equity assessments of global climate action. This is a key source of the systematic bias in favour of wealthier, higher-emitting countries.

Dooley, K., Holz, C., Kartha, S. et al. (2021). Ethical choices behind quantifications of fair contributions under the Paris Agreement. *Nature Climate Change*. <https://doi.org/10.1038/s41558-021-01015-8>

Demonstrating that electric freight trucks are competitive

This study shows that electric battery-powered freight trucks can be economically competitive with diesel trucks. It challenges a long-held view that has previously dismissed electric freight trucks as too costly. With battery technology improving rapidly, heavy battery electric trucks can compete – and likely soon. To be commercially competitive, such vehicles need one critical piece of infrastructure: fast-charging networks. The authors use a model that evaluates costs, energy use, and battery pack weight. It compares how these factors influence load capacity and costs, and then compares the results with those of a conventional fully loaded diesel truck.

Nykqvist, B. and Olsson, O. (2021). The feasibility of heavy battery electric trucks. *Joule*. <https://doi.org/10.1016/j.joule.2021.03.007>

Shining a light on fossil fuel subsidies in the US

Fossil fuel subsidy reform is promoted as a key measure for reducing emissions, especially when such subsidies do not support poor consumer groups. This study found that in the US, existing production subsidies mainly lead to excess profits in the oil and gas sector. US fossil fuel subsidies could increase the profitability of new oil and gas fields by more than 50% over the next decade, with almost all of the subsidy value flowing to excess profits. Researchers at SEI and Earth Track examined 16 subsidies and environmental regulatory exemptions, providing one of the first estimates of how government subsidies will affect investment decisions for new gas fields in the coming decade.

Achakulwisut, P., Erickson, P. and Koplow, D. (2021). Effect of subsidies and regulatory exemptions on 2020–2030 oil and gas production and profits in the United States. *Environmental Research Letters*. 16 (8). <https://doi.org/10.1088/1748-9326/ac0a10>

Revealing under-investment in climate adaptation in Africa

International financial assistance is expected to support African and other developing countries as they prepare for and adapt to the impacts of climate change. The impact of this finance depends on how much is mobilized and where it is targeted. The authors tracked development finance targeting climate adaptation from diverse funders to Africa between 2014 and 2018 to quantitatively map adaptation-related finance flows to African countries. The amounts of finance are well below the scale of investment needed for adaptation in Africa, which is a region with high vulnerability to climate change and low adaptation capacity. Finance targeting mitigation (\$30.6 billion) was almost double that for adaptation (\$16.5 billion).

Savvidou, G., Atteridge, A., Omari-Motsumi, K. and Trisos, C.H. (2021). Quantifying international public finance for climate change adaptation in Africa. *Climate Policy*. <https://doi.org/10.1080/14693062.2021.1978053>

On the importance of peatlands for the climate

The carbon balance of peatlands is predicted to shift from a sink to a source this century. However, peatland ecosystems are still omitted from the main Earth System Models used for future climate change projections and they are not considered in Integrated Assessment Models used in impact and mitigation studies. Using evidence synthesized from the literature and an expert elicitation, the leading drivers of change that have impacted

peatland carbon stocks during the Holocene are defined and quantified, and their effect during this century and the far future are predicted.

Loisel, J., Gallego-Sala, A. V., Amesbury, M. J., et al. (2020). Expert assessment of future vulnerability of the global peatland carbon sink. *Nature Climate Change*. 11, 70-71 (2021). <https://doi.org/10.1038/s41558-020-00944-0>

On the role and impact of green bonds

Green bonds are one of the most prominent innovations in sustainable finance of the past decade. However, to date the few academic studies on green bonds have tended to focus on what impact green labels have on bond yields. This article is one of the first empirical studies designed to address the broader questions of what attracts investors and issuers to the green bond market, the role of green bonds in shifting capital to more sustainable economic activity, and how green bonds impact the way organizations work with sustainability.

Maltais, A. and Nykvist, B. (2020). Understanding the role of green bonds in advancing sustainability. *Journal of Sustainable Finance & Investment*. 1-20. <https://doi.org/10.1080/20430795.2020.1724864>

Index for measuring empowerment in the water and sanitation sector

Dickin, S., Bisung, E., Nansi, J. and Charles, K. (2021). Empowerment in water, sanitation and hygiene index. *World Development*. 137. 105158. <https://doi.org/10.1016/j.worlddev.2020.105158>

New methods to learn about urban well-being the Global South

Cinderby S., Archer, D., Mehta, V.K, Neale, C., Opiyo, R., Pateman, R.M., Muhoza, C., Adeline, C. and Tukhanen, H. (2021) Assessing Inequalities in wellbeing at a neighbourhood scale in low-middle-income-country secondary cities and their implications for long-term livability. *Frontiers in Sociology*. 6. 729453. <https://doi.org/10.3389/fsoc.2021.729453>

On equity and justice in resilience

Ensor, J. E., Mohan, T., Forrester, J., Khisa, U.K., Karim, T. and Howley, P. (2021). Opening space for equity and justice in resilience: A subjective approach to household resilience assessment. *Global Environmental Change*. 68. 102251. <https://doi.org/10.1016/j.gloenvcha.2021.102251>

A framework for analysing cross-border climate impacts

Carter, T.R., Benzie, M., Campiglio, E., Carlsen, H., Fronzek, S., Hildén, M., Reyer, C. P. O., and West, C. (2021). A conceptual framework for cross-border impacts of climate change. *Global Environmental Change*. 69. 102307. <https://doi.org/10.1016/j.gloenvcha.2021.102307>



Funding sources

As an independent research and policy organization, SEI receives funding from a wide variety of sources, including government departments, development agencies, non-governmental organizations, businesses, academic and research groups and financial institutions. We are grateful to the following funding partners for their support in 2021.

327m

Total

102.1m

Swedish International Development Cooperation Agency (Sida)

34.0m

Swedish Ministry of the Environment via Formas

20.7m

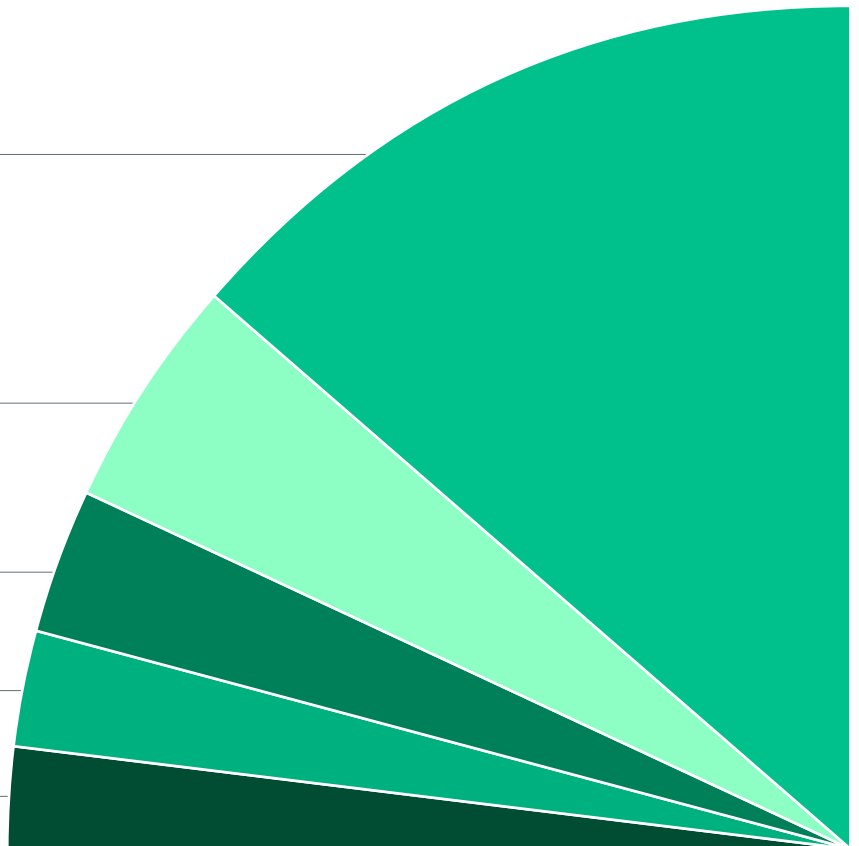
The Swedish Research Council Formas

14.5m

The Swedish Foundation for Strategic Environmental Research (Mistra)

13.4m

Gordon and Betty Moore Foundation



Total funding and top five funders. All figures are in SEK millions.

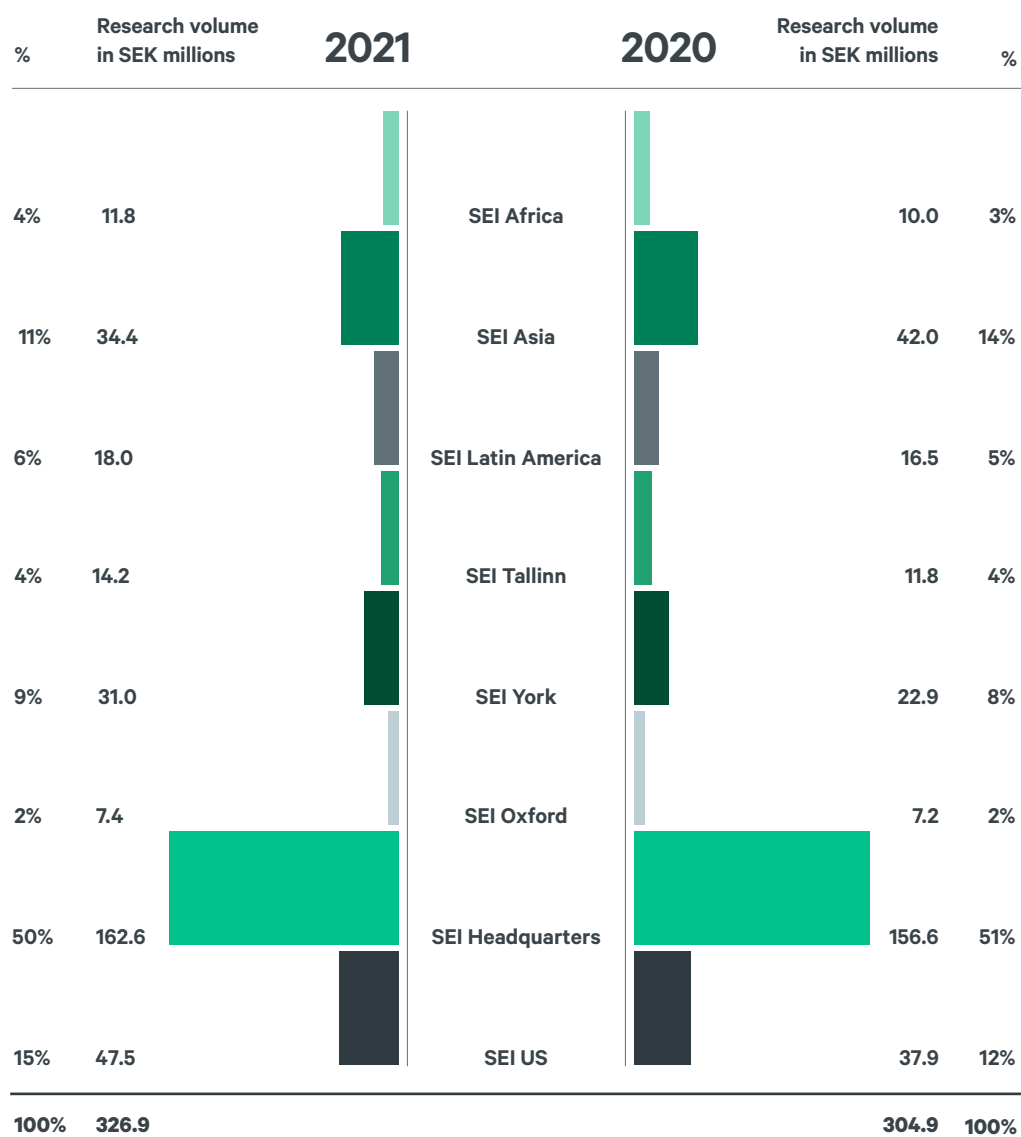
Funding sources above SEK 50 000

Abt Associates	313 319	European Commission	10 506 243
AECOM	822 353	European Research Area	
Agence Française de Développement (AFD)	618 389	for Climate Services (ERA4CS)	993 403
Asian Disaster Preparedness Centre (ADPC)	989 527	Fabège	150 550
Asian Institute of Technology (AIT)	224 149	Food and Agriculture Organization	
Asset Owner Alliance	304 038	of the United Nations (FAO)	1 132 804
Belmont Forum	1 056 211	Global Canopy	334 773
BioInnovate Africa	307 765	Global Centre on Adaptation (GCA)	701 027
C40 Cities Climate Leadership Group Inc.	347 070	Global Challenges Research Fund (GCRF)	351 958
California State Water Resources Control Board	3 754 845	Global Environment Facility (GEF)	653 267
Calyx	265 306	Gofore Estonia OÜ	315 873
Cascadia Consulting Group	95 755	Gordon and Betty Moore Foundation	13 390 660
Centre for Development Research – University of Bonn	132 916	Greenhouse Gas Management Institute	539 873
Centro UC de Cambio Global	330 002	Helvetas	226 102
Chalmers University of Technology	216 000	High Tide Foundation	947 906
Chulalongkorn University	110 560	IDB	911 808
Civitta Eesti AS	240 749	IKEA Supply AG	459 045
Clean Energy Transition Institute	135 656	Informa UK Limited	77 611
Climate Equity Reference Project	865 039	Institut de recherche pour le développement (IRD)	101 522
Climate Solutions Accelerator	419 935	Institute for Advanced Sustainability Studies e.V (IASS)	239 547
Collective Water Resources LLC	453 451	Institute for Governance	
Colorado Springs Utilities	462 784	and Sustainable Development (IGSD)	897 533
Corpocaldas – Corporación Autónoma		Integrated Research on Disaster Risk (IRDR)	120 000
Regional de Caldas	436 699	Inter-American Development Bank	68 759
Corpochivor – Corporación Autónoma		International Development Research Centre (IDRC)	1 575 426
Regional de Chivor	259 504	International Institute for	
Council on Ethics	102 290	Sustainable Development (IISD)	207 900
Critical Ecosystem Partnership Fund (CEPF)	89 528	International Organization for Migration (IOM)	259 105
Danish Refugee Council (DRC)	273 824	ITPENergised	324 108
Defence Research Centre	370 470	Joint Nature Conservation Committee (JNCC)	536 729
Department for Environment		Korea Environment Institute (KEI)	111 362
Food and Rural Affairs (Defra)	242 288	KR Foundation	1 609 205
Department for International Development (DFID)	4 696 314	Larry Walker Associates (LWA)	331 569
Deutsche Gesellschaft für		Law Family Charitable Foundation	1 424 883
Internationale Zusammenarbeit (GIZ)	3 268 462	Leverhulme Trust	80 716
Earthjustice	183 406	Lincoln Institute of Land Policy	301 463
Economic And Social Research Council (ESRC)	3 583 356	Mae Fah Luang University	163 866
EED Advisory Ltd	76 672	Marianne and Marcus Wallenberg Foundation	100 513
Emerging Cooking Solutions Sweden	194 421	Medical Research Council (MRC)	91 448
Energy Transition Fund	486 063	Ministry of Economic Affairs	
Engineering and Physical Sciences		and Climate Policy The Netherlands	245 307
Research Council (EPSRC)	2 057 644	National Oil and Gas Authority (NOGA)	564 481
Environmental Law & Policy Center	217 411	National Science Foundation (NSF)	
Environmental Science Associates (ESA)	880 440	via University of Michigan	144 971
European Climate Foundation	517 999	Natural Environment Research Council (NERC)	2 264 194

Natural Resources Defense Council (NRDC)	90 509	The Swedish Energy Agency	2 107 189
NETpositive Futures	350 902	The Swedish Environmental Protection Agency	4 429 249
Network of African Science Academies	57 086	The Swedish Foundation for Strategic Environmental Research (Mistra)	14 544 273
NordForsk	405 758	The Swedish Institute	397 763
Nordic Climate Facility (NCF)	73 751	The Swedish Ministry for Foreign Affairs	2 553 222
Nordic Council of Ministers	292 652	The Swedish Ministry for the Environment	6 460 000
Northeast States for Coordinated Air Use Management (NESCAUM)	979 306	The Swedish Ministry for the Environment via Formas	34 000 000
Norwegian Agency for Development Cooperation – Norad	5 636 348	The Swedish Postcode Lottery	173 374
Norwegian Ministry of Climate and Environment	1 453 477	The Swedish Research Council (Vetenskapsrådet)	138 861
Oeko	128 185	The Swedish Research Council Formas	20 714 120
Oxfam International	302 973	The Swedish Transport Administration	1 970 692
Oxford Policy Management	1 380 268	Trinomics B.V.	778 682
Quadrature Climate Foundation	4 164 876	Tufts University	158 735
Republic of Estonia Ministry of the Environment	761 341	UiT The Arctic University Norway	274 663
Republic of Estonia Ministry of Economic Affairs and Communications	291 109	UN Women	371 569
Research England	903 315	United Nations Children's Fund (UNICEF)	97 554
Santa Clara Valley Water District	1 817 892	United Nations Development Programme (UNDP)	1 073 936
Scania CV AB	157 872	United Nations Environment Programme (UNEP)	7 390 188
Schmidt Family Foundation	786 431	United Nations Foundation	1 264 535
Science And Technology Facilities Council	562 057	United Nations Headquarters	1 261 628
Skandiatiftelsen/Amphionstiftelsen	1 198 459	United Nations Office for Disaster Risk Reduction (UNDRR)	145 720
Stand.Earth	176 352	United Utilities Water Ltd	350 049
Sustainable Markets Foundation	1 656 996	University of Bristol	105 982
Swedish Agency for Marine and Water Management	432 400	University of California, Riverside	282 371
Swedish International Development Cooperation Agency (Sida)	102 085 319	University of Oxford	341 330
Swiss Agency for Development and Cooperation	779 651	University of York	315 107
Tallinn Strategy Centre	406 066	USAID	1 623 164
Tallinn University of Technology	525 191	USAID via Tetra Tech	1 040 505
The Australian Centre for International Agricultural Research (ACIAR)	442 852	USAID via Winrock	145 043
The Belgian Federal Public Services (FPS)	54 075	Vermont Agency of Natural Resources	60 511
The British Academy	454 318	Vinnova	4 265 417
The Danish Ministry of Climate Energy and Utilities	84 893	VITO	57 581
The Expert Group for Aid Studies (EBA)	329 349	Wellcome Trust Ltd	1 500 576
The Kamprad Family Foundation	115 763	World Bank Group	2 658 938
The Moorland Association	188 363	World Health Organization (WHO)	1 006 998
The Research Council of Norway	172 042	World Resources Institute (WRI)	226 002
The Swedish Civil Contingencies Agency (MSB)	1 296 671	World Wide Fund for Nature (WWF)	864 898
		Yolo County California	122 768
		Yolo Subbasin Groundwater Agency (YSGA)	285 618
		Yorkshire Water	400 607

SEI financial statistics

SEI global (pro forma) income, by centre





SEI focuses on building trust, empowerment and co-creating knowledge, leading to ownership of results and sustained action.



Strategy for action



- Type of outcome
- Impact area
- Priority for change

SEI's strategy focuses on three broad impact areas where we believe we can make a real impact. Under each area we've set out priorities for change. We deliver on these priorities by working with partners and stakeholders to change agendas, improve decisions and enhance capacities.

We are approaching the midpoint of our current strategy, which runs from 2020 to 2024. The five-year period it spans has already seen crisis and upheaval in the shape of the pandemic. And now, war has broken out in Europe of a kind that most thought had been banished to history.

The Russian invasion of Ukraine is a profoundly disturbing event, as all war is, foremost because of the human cost. But this war looks set to have transformative effects on global security, geopolitics and economies for decades to come.

At the time of writing, it is impossible to discern exactly how these effects will play out. Two things can be said with certainty: the values that underpin SEI's work and the wider multilateral sustainability agenda will be more important than ever; and the policies and investments required to forge resilient and just societies go hand-in-hand with peace.

The creation of SEI in 1989 – its name, values and mandate – were derived from the United Nations Conference on the Human Environment held in Stockholm in 1972, which culminated in the Stockholm Declaration. The principles that the Declaration articulates have only grown more relevant over time. These include human rights and well-being, safeguarding natural resources for present and future generations, tackling poverty, maintaining renewable resources, conservation, financial and technological transfer, scientific research and international cooperation.

Current events are a fundamental challenge to these principles. It is imperative that we stand up for them and drive ahead with action and solutions that put these principles into practice. And those in positions of power must be accountable for their commitments on the twin crises of climate change and biodiversity loss, shared prosperity and justice, and peace and human rights.

Action and accountability

The stories in the following pages highlight how, over the past year, SEI's strategy has been put into practice.

During the pandemic our strategy enabled action and delivered change. We are confident it will remain durable as the world again faces troubling times.

They show how our research is being applied in a “new frontier” of climate-related court decisions in which polluters are being held accountable for the consequences of their actions and operations (page 34).

SEI research also helped deliver the Global Methane Pledge, launched by the US and the EU at COP26 – an essential step to taking meaningful climate action, supported by 111 countries (page 36).

Working for many years with legislators in Nairobi on air pollution has now borne fruit in the form of new policies and legislation to curb air pollution in Kenya's capital (page 38).

Engagement with 15 countries has enabled them to ramp up their climate ambitions, while also bringing benefits for health and well-being by reducing pollution (page 40).

At the community level, we partnered with local people in sub-Saharan Africa to co-develop a plan for a transition to cooking with clean electricity (page 42).

The Trase initiative has provided data and analysis to help investors identify deforestation in their supply chains, empowering them to remove this risk from investment portfolios (page 44).

During the pandemic, our strategy enabled action and delivered change. We are confident it will remain durable as the world again faces troubling times.

The principles in which it is rooted, set out more than 50 years ago, must endure.

Strategy in action

Priority for change

Transitions from fossil energy that address inequality, poverty and political economy

SEI research provides authoritative evidence in influential court cases in Europe and the US against major global polluters, compelling them to take responsibility for their contributions to the climate crisis by radically cutting their fossil fuel production and carbon dioxide emissions.

Type of outcome

Improving decisions

Evidence provided by SEI demonstrates how accepted economic theory can disprove flawed arguments presented by oil companies and reveal how increased production does in fact lead to higher use and carbon dioxide emissions.

Delivering on our priorities



4 Transitions from fossil energy that address inequality, poverty and political economy

SEI research underpins new frontier of climate-related court decisions

A growing number of legal cases ruling against major global polluters are compelling governments and companies to take responsibility for their contributions to the climate crisis. SEI's work has been cited in consequential domestic and international decisions, with more likely to come.

When the District Court of The Hague in the Netherlands ruled in May 2021 that Shell, one of the world's biggest oil companies, must cut its carbon dioxide emissions by 45%, it was the world's first legal decision to hold an oil company liable for climate change.

The ruling came after Milieudefensie, the Dutch arm of Friends of the Earth, joined several other non-profit organizations and 17 000 individuals to file a lawsuit against Royal Dutch Shell plc in 2019. The decision included emissions associated with burning oil and gas (known as "scope 3" emissions), in effect ruling that Shell must reduce its fossil fuel production.

Authoritative source cited in proceedings

SEI research played a part in the decision, with the judgment quoting two excerpts from the [2019 Production Gap Report](#). SEI US Climate Policy Program Director Peter Erickson also wrote a letter to the court in December 2020, refuting a Shell-commissioned report issued the previous month and countering its arguments with SEI research and other peer-reviewed scientific sources.

"This is a turning point in history," said Roger Cox, attorney for Friends of the Earth Netherlands. "This case is unique because it is the first time a judge has ordered a large polluting company to comply with the Paris Climate Agreement. This ruling may also have major consequences for other big polluters."





“[This] verdict is in line with the research: if oil majors like Shell reduce their fossil fuel production, it will help reduce global CO₂ emissions, as necessary to meet climate goals,” said Erickson after the ruling. “Limiting fossil fuel production is an important step, among many, to keep global warming to 1.5°C, as agreed in the Paris Agreement.”

Oil drilling platforms off Texan coast.

Court rulings become new target in tackling climate change

Legal and climate policy observers have seen legal proceedings become a new frontier of climate action, in the absence of transformative legislation. While the UN Environment Programme pegged the number of climate change litigation cases at 1 550 in 38 countries in January 2021, a check of worldwide cases logged by Columbia University’s Sabin Center for Climate Change Law yielded nearly 2000.

The Dutch ruling was followed in August by a US District Court of Alaska ruling that nullified the US Bureau of Land Management’s (BLM) approval of a ConocoPhillips oil and gas project in Alaska’s North Slope, citing SEI research in determining that BLM neglected to assess foreign greenhouse gas emissions resulting from the project, as required by federal law.

In January 2022, the US District Court for the District of Columbia invalidated the largest-ever oil and gas lease in American history, again citing SEI research on the flaws in the Department of Interior’s greenhouse gas emissions analysis.

Legal arguments bolstered by scientific research

The August 2021 and January 2022 decisions were based in part on the precedent set by

a November 2020 ruling that was also based on SEI research. It determined that the US Department of Interior’s Bureau of Ocean Energy Management (BOEM) erred in approving an offshore drilling and production facility on the Alaskan coast in the Beaufort Sea, because BOEM likewise failed to properly account for the project’s effects on foreign oil consumption.

A common thread through oil companies’ arguments in these cases is that if they do not produce the oil, other companies would, which, based on his research, Erickson said is a faulty assumption. While courts have rebutted that argument for coal, “these four cases are the first I’m aware of that counter that argument for oil,” he added.

Future effects

Erickson said SEI’s influence in court cases aligns with its purpose. “Our mission is to bridge science and policy,” he said. “Scientists need to show up where decisions are being made and bring the information and science to them.”

Other pending cases that are considering SEI research include a Michigan case evaluating the replacement of an oil pipeline and *Juliana v. United States*, in which 21 children sued the federal government for depriving them of a habitable planet.

Strategy for action

Priority for change

Government plans to tackle climate change with multiple benefits

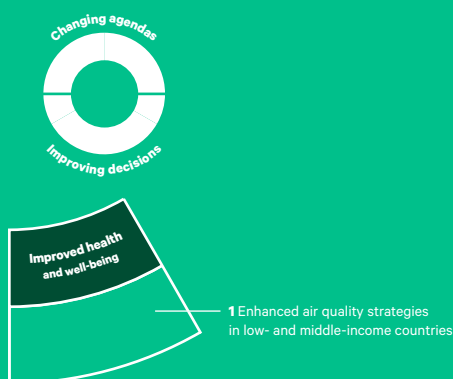
The Assessment shows that human-caused methane emissions can be reduced by up to 45% this decade, averting nearly 0.3°C of global warming by 2045 and consistent with the Paris Agreement's goal to limit global temperature rise to 1.5°C.

Type of outcome

Changing agendas, improving decisions

A total of 111 countries have signed on to the Pledge, representing nearly 50% of global anthropogenic methane emissions and over two-thirds of global GDP, and agreeing to collectively take voluntary actions to reduce global methane emissions by at least 30% from 2020 levels by 2030.

Delivering on our priorities



Research paves way for Global Methane Pledge

SEI co-authored the **Global Methane Assessment report** published by the **United Nations Environment Programme (UNEP)** and **Climate and Clean Air Coalition (CCAC)** in May. The report provided a strong foundation for the launch of the **Global Methane Pledge** at **COP26** in November.

Methane is a powerful but short-lived climate pollutant that accounts for a substantial fraction of the net rise in global average temperature since the pre-industrial era, with the second highest impact after CO₂.

It is vital to take decisive action to rapidly reduce methane emissions from energy and agriculture to achieve near-term climate gains within this decade. Doing so is probably the single most effective strategy to keep the goal of limiting warming to 1.5°C within reach at the same time as it yields co-benefits, including better public health and agricultural productivity.

The report highlights that a 45% reduction in global methane emissions by 2030 compared to a 2020 baseline, equivalent to 180 million metric tons per year, is the most cost-effective pathway to limit global temperature increases in the near term. Its effects are so potent that without reducing it substantially, it is not possible to limit global warming to 1.5°C.

Improved health outcomes, increased crop yields

A 45% reduction would avert nearly 0.3°C of global warming by the 2040s and other impacts on human health and crop yields, according to the modelling undertaken in the Global Methane Assessment. This is due to fewer health problems related to heat stress for people working outdoors, as well as the fact that methane is an important precursor of polluting ground-level ozone that affects health and crop yields.

A 45% reduction in methane would prevent about:

- 255 000 premature deaths
- 775 000 asthma-related hospital visits
- 73 billion hours of lost labour from extreme heat
- 26 million tonnes in global crop losses.

Pledge announced at COP26

Following the publication of the Global Methane Assessment and engagement through the work of SEI and its partners, especially the CCAC, the US and EU

announced the Global Methane Pledge at COP26 in November, which aims to reduce methane emissions by 30% in 2030 compared to 2020 levels. A total of 111 countries signed on to the Pledge, representing nearly 50% of global anthropogenic methane emissions.

Commitment to cut methane emissions

As well as committing to the 30% reduction in global methane emissions, the Pledge will convene annual ministerial meetings to review progress. Participants signing the Pledge agree to collectively take voluntary action to reduce global methane emissions, which could reduce warming by 0.2°C by 2050. They also commit to using the highest tier of IPCC good practice inventory methodologies, as well as continuing to improve the accuracy, transparency, consistency, comparability and completeness of national greenhouse gas inventory reporting under the UNFCCC and Paris Agreement and providing greater transparency in key sectors.

One of the most important things we can do in this decisive decade is – to keep 1.5 degrees in reach – is reduce our methane emissions as quickly as possible.

– US President Joe Biden, speaking at the Global Methane Pledge event at COP26

Delivering on the Pledge will require strengthening international initiatives to reduce methane emissions, advancing technical and policy work and recognizing the essential roles that the private sector, development banks, financial institutions and philanthropy play in implementing the Pledge. More than half of global methane emissions stem from human-caused activities in the agriculture (about 40%), fossil fuel (about 35%) and waste (about 20%) sectors. Currently available measures identified in the Assessment could reduce emissions from these sectors by 45% by 2030.

What happens next?

The impact of the Global Methane Assessment was driven by its focus on multiple benefits, continued engagement with decision makers by different partners, and substantial media coverage.

A co-author of the Assessment, SEI Research Leader Johan Kuylensstierna, points out that the Pledge can go further: “The Global Methane Assessment identified that we have the ability to reduce methane emissions by about 10% more than what is set out in the Pledge, which will more firmly ensure that we shift into a 1.5°C pathway. One way to make sure of this is for all major emitters to engage with methane reduction and for China and the US have signed a separate agreement to collaborate on climate change.”

More than US\$300 million of philanthropic funds have been pledged to help countries to implement the Pledge. Countries will need support to develop detailed road maps to implement the measures and overcome financial and other barriers to ensure that emissions are reduced by 2030.



US President Joe Biden announces the Global Methane Pledge at COP26 in Glasgow alongside EU Commissioner Ursula von der Leyen. SEI co-authored the report that underpinned the Pledge.

Strategy for action

Priority for change

Enhanced air quality strategies in low- and middle-income countries

SEI has worked with Nairobi City County Government in collaboration with UNEP to share empirical evidence with legislators from Nairobi City County, leading to the development of a responsive regulatory framework for the city.

Type of outcome

Improving decisions, enhancing capacities

Since 2016, SEI has worked with stakeholders in Nairobi to raise awareness of the issue and build capacity among decision makers. The resulting legislative framework will guide decision-making across a range of sectors to cut dangerous air pollution in Nairobi and can serve as a model for action in other Africa cities.

Delivering on our priorities



1 Enhanced air quality strategies in low- and middle-income countries

Legislation for clean air in Kenya

Long-term partnership with lawmakers in Nairobi ushers in Air Quality Policy and Air Quality Bill for Kenya's capital.

Air pollution is linked to hundreds of thousands of deaths every year across Africa and is a growing public health issue in Kenya, causing around 18 000 premature deaths annually, as well as millions of cases of respiratory disease. In Nairobi, as in many fast-growing cities around the world, the health impacts of air pollution disproportionately affect the poor and vulnerable and are a brake on development and economic progress.

Sustained engagement brings results

The urgency of tackling Nairobi's deteriorating air quality has spurred policymakers and civil society to act. Since 2016, SEI Africa has partnered with the city on developing policy responses that can tackle the challenge. And last year these efforts bore fruit. The County Parliament adopted an Air Quality Policy, as well as an Air Quality Bill, which will be taken through the County Assembly in 2022.

The legal and policy instruments were driven forward during a series of workshops for city legislators, run by SEI Africa in partnership with the United Nations Environment Programme (UNEP). The interactive sessions aimed to empower the Parliamentary Committee on Environment and Natural Resources by providing evidence on air quality in Nairobi, and by sharing lessons from other cities, to support evidence-based air quality legislation for Nairobi.

Commitment to implementation

At the workshops, city parliamentarians and government representatives reviewed the legislative framework, alongside representatives from technical institutions, national transport and energy sector agencies, and academics from local universities.

The aims were to lay out the legislative framework for air quality management, discuss and agree on the key elements of the Nairobi Draft Air Quality Bill, develop a roadmap and strategy for finalizing and adopting the Bill, and to raise awareness on budgeting for an air quality unit to support the implementation of the Bill once enacted. At the end of discussions, the top leadership of the Nairobi City Council Assembly agreed to the road map and assured the team of its commitment to the draft and its implementation.



I used to assume that the issue of pollution is not a big deal, but when we engaged with you, I was quite happy. There is a lot we need to learn and that is why we are back here ... when we discuss with our fellow citizens, they can see what needs to be done.

– Benson Mutura, Speaker, Nairobi City County Assembly

Benson Mutura, Speaker of the County Assembly of Nairobi, said:

“It has been a learning process for us, and I believe that this is one of the areas that has been neglected for too long. I used to assume that the issue of pollution is not a big deal, but when we engaged with you, I was quite happy. We also want to be your ambassadors so that we can articulate issues and that when we discuss with our fellow citizens, they can see what needs to be done. When we have information, it becomes very easy to convince other people.”

Technical support

To support the engagement and capacity building efforts, SEI and UNEP hosted the technical committee

that developed the initial draft of the policy and provided technical support in generating air quality data and training for technical officers from the county government’s environment and health units. SEI staff also testified to a sitting of the city’s Committee on Environment and Natural Resources focusing on the Nairobi Air Quality Policy.

Looking ahead

The existence of a new regulatory framework in Kenya will help to promote action on air pollution beyond sectors, such as transport, that are traditionally associated with air pollution. There is great potential to use lessons learned in Nairobi to develop policy on air quality in locations where C40 Cities is active, such as Accra, Addis Ababa, Cape Town, Dakar, Dar es Salaam, Durban, Johannesburg and Lagos.



Parliamentarians from the Nairobi City County Assembly at a workshop on air quality legislation in Mombasa, Kenya, May 2021.

Strategy in action

Priority for change

Government plans for low carbon pathways with multiple benefits

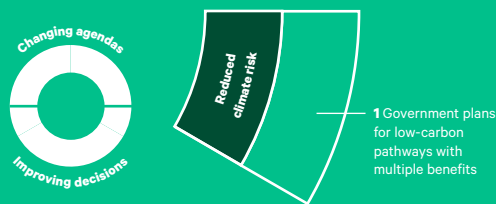
SEI supported national climate experts in 15 countries to raise climate ambition and in doing so realize other social and economic co-benefits. SEI worked with Bangladesh, Benin, Colombia, Costa Rica, Côte d'Ivoire, the Dominican Republic, Eswatini, Ghana, Nigeria, Liberia, Mali, Mongolia, Togo, Uganda and Zimbabwe, in partnership with the Climate and Clean Air Coalition (CCAC) project Supporting National Action and Planning (SNAP), United Nations Development Programme's (UNDP) Climate Promise and the NDC Partnership's Climate Action Enhancement Package (CAEP).

Type of outcome

Improving decisions

A key focus of SEI's Integrated Climate and Development Planning Initiative work to enhance countries' climate commitments has been to integrate sustainable development benefits into updated NDCs so that national stakeholders can understand how aiming higher on climate change mitigation can have a range of local benefits.

Delivering on our priorities



Fifteen countries boost climate targets ahead of COP26

SEI supported countries in Africa, Asia and Latin America to boost their climate commitments – and show how cutting emissions can have a range of other benefits, especially for health. This in turn can drive future efforts to cut greenhouse gases.

Research clearly shows the gap between countries' existing pledges to reduce greenhouse gas emissions – their Nationally Determined Contributions (NDCs) and the reductions necessary to limit global temperature increases to 1.5°C. It is vital that all countries set their sights higher. By cutting emissions, countries can reap a range of other benefits, especially health benefits from reduced pollution, as well as contributing to development targets. Many countries are determined to do so – but how?

As part of SEI's work with partners including the Climate and Clean Air Coalition, NDC Partnership and the UNDP, SEI supported 15 countries in Africa, Asia and Latin America (see sidebar) to update and strengthen their climate change commitments ahead of COP26 in Glasgow.

Higher ambition, broader scope

In each country, SEI collaborated with local stakeholders from Ministries of Environment and academia, and with local consultants, to evaluate the impact of different policies and measures on greenhouse gas reductions. Collaboration with local experts ensured access to relevant data and more importantly, that the analysis was nationally owned: that those required to approve the climate commitments agreed with and accepted the results.

The results of this work fed into robust science-based targets that have been included in these countries' updated NDCs submitted at COP26 in Glasgow. For example, Zimbabwe's NDC, submitted in 2021, commits to a 40% reduction in GHG emissions from all sectors, compared to a 33% reduction from only the energy sector.

Many countries also had a clear ambition to expand the scope of their climate change commitments to include all greenhouse gas emitting sectors. SEI worked to identify and collect the necessary data to reflect sectors that were not covered in previous commitments,

and to identify the most appropriate measures to achieve reductions in those sectors. As a result, the NDC update for Zimbabwe, for example, includes all sectors rather than just energy.

Other countries also broadened the scope of their NDCs. Nigeria's update extends emission reductions to the waste sector and in Mali, Togo and Benin, hydrofluorocarbons are now included in the greenhouse gases that are covered in the emission reduction targets.

First ever measure of health benefits of national climate commitments

SEI also supported the inclusion of the first-ever quantified statement in an NDC of local health benefits that could be achieved by meeting climate change mitigation targets.

In Nigeria, 30 000 premature deaths could be prevented by 2030 from implementation of its updated NDC, the large majority of which are infant deaths from respiratory infections. Globally, by 2030, hundreds of thousands of premature deaths per year can be prevented because of improved air quality indoors and outdoors achieved alongside greenhouse gas emission reductions.

Contribution to national development plans

Alongside air pollution health benefits, SEI's efforts have led to countries aligning climate commitments with national development plans. In the case of Zimbabwe, its NDC was expanded to include all sectors, meaning that the potential for mitigation in the forestry sector was reflected in the greenhouse gas assessment and updated NDC.

Zimbabwe's National Development Strategy 1 (2021–2025) includes actions in forestry to tackle deforestation, land degradation and forest fires.

Because these measures were included in the mitigation

Unlike the first NDC, which covered only the energy sector, this NDC makes progress towards an economy-wide NDC as it includes the waste, industrial processes and product use and the agriculture, forestry and other land-use sectors.

– N.M. Ndhlovu, Minister of Environment, Climate, Tourism and Hospitality Industry, Zimbabwe

assessment co-developed with SEI, it was demonstrated that they have among the largest potential for reducing emissions of all the measures considered and were therefore crucial for increasing ambition in Zimbabwe's climate commitments.

Looking ahead

These collaborative efforts on target setting are paving the way for SEI to build long-term partnerships with countries as they move to the delivery and monitoring phase to help ensure that the greenhouse gas reductions and development benefits are both realized.

A greater understanding of the multiple benefits of cutting greenhouse gas emissions – especially for health – can help to drive more ambitious NDCs in the future and could speed up action on existing commitments.

Because the mitigation assessments cover more sectors, not only can mitigation targets aim higher, but the range of sectors that can access finance to implement mitigation projects is expanded, driving further action.



Lagos, Nigeria. By 2030, 30 000 deaths from air pollution can be saved if Nigeria's new climate commitments – which SEI helped to shape – are met.

Strategy in action

Priority for change

Energy transitions that address inequality, poverty and political economy

Kenya plans to transition households to clean and modern cooking energy by 2030, which supports the country's policy ambition to scale up access to modern energy by 2030 and addresses one of the most pressing development challenges.

Type of outcome

Enhancing capacity, improving decisions

By using backcasting to facilitate the co-design of an energy transition plan, the study highlighted the co-benefits of cooking with electricity in rural sub-Saharan Africa. It also underscored how vital it is to understand local perspectives in the energy transition. Six months on, the community members had begun to implement actions described in the plan.

Delivering on our priorities



4 Transitions from fossil energy that address inequality, poverty and political economy

Households in Kenya empowered for clean energy shift

SEI partnered with an off-grid community in Kenya to co-design a 10-year roadmap towards electricity powered cooking. Local people set out their vision and a roadmap for change and are using it as a touchstone for action – and to call on decision-makers for the support they need to make the transition happen.

Providing clean energy for cooking for the three billion people globally without it is among the most pressing development challenges. A heavy reliance on fuelwood, charcoal and kerosene leads to 4 million premature deaths every year from exposure to smoke. In sub-Saharan Africa, the number of people without access to clean cooking technologies increased from an estimated 750 million people in 2010 to 900 million in 2017, or about 80% of the population, most of whom live in rural areas.

Cooking with electricity is quickly becoming cost-effective and feasible for households in both urban and rural sub-Saharan Africa. But little work has been done to understand local people's views on large-scale transitions like rural electrification programmes and the role they can play in them.

Workshop participants discuss the road map over a cup of tea.





Community members developing the road map.

Imagining cooking with electricity in 2030

In February 2020, SEI ran a two-day workshop with 30 community members in Kitulu Village in rural Machakos County, Kenya, to understand how people think about transitioning to electrical cooking by 2030.

The team used backcasting, a participatory method of considering future outcomes, as the tool to build the transition road map. People of different ages who did not use electricity for cooking were asked to imagine that it was 2030 and everyone in the community now cooked with electricity. After that, they discussed what would need to happen to get there, and by when.

By the end of the two days, the participants had developed a detailed map for a transition to cooking with clean energy that set out key actions, who needed to take responsibility for what, and what targets and local resources were needed.

Action in the community

At the end of the workshop, one of the older participants said, “NGOs sometimes come here and ask what we would like them to do for us. Sometimes this is a difficult question to answer ... so many things are needed. But now we have a road map, we can use it to remind ourselves of where we would like to go, and what help we should be asking for.”

Six months after the workshop, SEI carried out a follow-up study with participants to see whether it had led to change, and interviews showed that the

NGOs sometimes come here and ask what we would like them to do for us. Sometimes this is a difficult question to answer ... so many things are needed. But now we have a road map, we can use it to remind ourselves of where we would like to go, and what help we should be asking for.

– A senior community member describes the workshop in Kitulu Village, Kenya

community was using the road map to take action. Participants had gathered a list of households and asked their local government representative for access to a financial programme for “last-mile” electricity connections. The community had also set up a local savings scheme to cover the costs of wiring up houses for electricity connections and had begun to invest in clean energy appliances like solar lanterns.

Building trust

Trust-building activities helped to put people at ease so they could speak openly during the workshop. By discussing the research and expectations early on, the team learned that the community expected to have a coherent and practical plan as an outcome. The community also wanted to make sure that the project report wasn’t shared externally until it had been approved by a village consultation. Local facilitators ran the workshop in the local language, Kamba, and held it in a church, where community matters are typically discussed.

Backcasting enables speculative yet structured thinking on complex change processes: the act of imagining and describing a desirable future was a positive and joyful experience for both the community and the research team. As one participant said at the end of the session, when arriving back in 2020, “It feels like coming from a dream, or from the moon, and crashing down to earth.”

Involving communities from the start

Typically, participatory scenario building is carried out by established experts. Instead, our findings suggest that rather than being involved after the fact, communities should be involved right from the start in making decisions on long-term programmes that will impact on their lives.

Strategy in action

Priority for change

Commodity sourcing strategies and standards that address deforestation and biodiversity

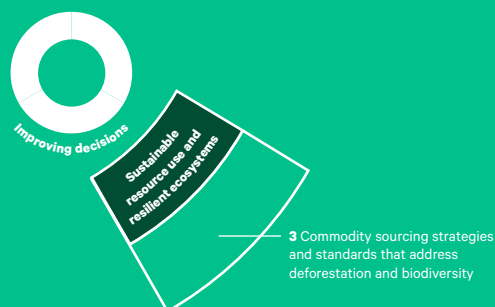
Through the Trase initiative, SEI and Global Canopy worked with Storebrand Asset Management to demonstrate how investors can identify and assess deforestation risk in their portfolios and take appropriate action.

Type of outcome

Improving decisions

Trase works with investors towards reducing biodiversity loss by enabling them to identify and remove tropical deforestation from their portfolios.

Delivering on our priorities



Trase helps investors take action on deforestation risk

How can investors identify and assess deforestation risk in their portfolios to inform their choices on engagement and divestment with companies? Through the Trase initiative, SEI and Global Canopy worked with Storebrand Asset Management to show how.

Some estimate that nearly half of all economic activity depends either “moderately” or “highly” on nature – around \$44 trillion of global GDP. Yet we continue to live in a way that exceeds the limits of the Earth’s natural systems, threatening future prosperity.

Tropical deforestation carried out to clear land for agricultural production is a significant driver of biodiversity loss, altered rainfall patterns and climate change. It is estimated that up to 13% of all human greenhouse gas emissions originate from deforestation, meaning that we cannot tackle the climate emergency without tackling deforestation.

Enabling transparency for investors

Deforestation from agriculture creates risks for commodity producers and traders. These include reputational damage, constrained access to capital, loss of market access and competitive risk, and operational risks from continued land clearance.

The complexity of agricultural production and supply chains creates a barrier to more effective investor action. Commodities such as cattle, soy and palm oil are sourced from land recently converted both legally and illegally, but investors are often unaware of how these commodities are ultimately sourced and how they are consequently financing climate change and biodiversity loss.

Comprehensive data

In the absence of comprehensive data on deforestation by financial data providers, Storebrand developed an approach using two monitoring and assessment tools: Trase, developed by SEI, Global Canopy and Neural Alpha, and Forest 500 by Global Canopy.

Storebrand selected companies in its portfolio for direct engagement using scores from Forest 500’s assessment to categorize companies into three groups: green, yellow and red.

Canary Wharf in London. Trase is working with investors to make deforestation risk transparent.

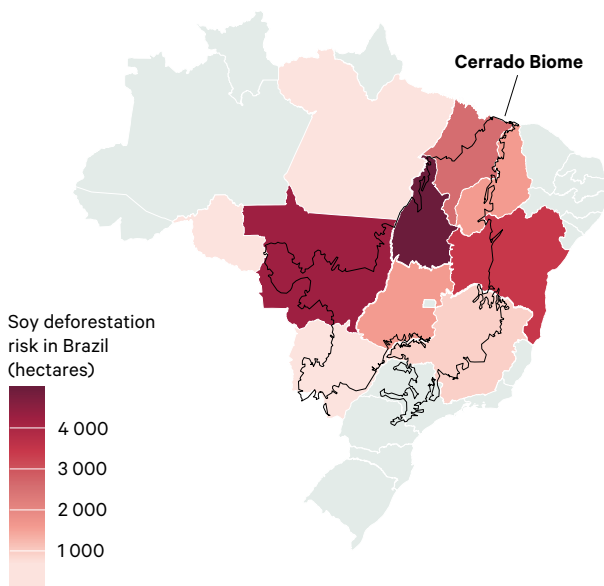
For red category companies, Trase data were used to drill down and identify deforestation risk, measured in hectares of deforestation. Storebrand then mapped the highest risk companies to their portfolios to identify companies that score well for policies and commitments, but are linked to persistent and high deforestation risks, and companies that have a low score for policies and commitments alongside high deforestation risk.

Holding companies to account

Storebrand uses proxy voting to exert extra influence over companies they are working with, or to signal the importance of sustainability issues. It will also consider filing shareholder resolutions if a company is not responsive to making necessary improvements in its policies.

In 2021, Storebrand co-filed a shareholder resolution with Green Century Capital Management at the annual general meeting of commodity trader Bunge, requesting that the company improve its implementation of its zero-deforestation policy. The shareholder resolution set out the case for the potential risks associated with the degradation of natural systems in the regions from which Bunge sources soy.

Trase supply chain data was used to strengthen the analysis that linked Bunge to areas of soy production where deforestation continues. Trase was able to provide a quantitative risk estimate for deforestation measured in hectares in aggregate and a measure of disaggregated sourcing to the state level for all of Bunge's exports of soy from Brazil. Where needed, Trase can also supply more detailed data at the level of municipalities.



What now?

Investors have a critical role to play in redirecting investment and finance towards sustainable business. The transition from unsustainable to sustainable production not only reduces deforestation risks, but also presents opportunities for investors.

Trase aims to support other investors looking to identify and remove tropical deforestation from their portfolios and to demonstrate their contribution to reductions in biodiversity loss and climate change.

Storebrand's work with Trase shows that there are simple and effective steps that investors can deploy now to identify deforestation risks in their portfolios, and to engage high-risk companies as a first step to signalling the requirement for improved performance.

To support financial institutions, Trase will produce a series of case studies showcasing practical and implementable measures to support financial institutions manage deforestation risk and develop new green finance products to fund the transition to zero deforestation.

To fulfill our commitment to have a deforestation-free portfolio by 2025, we need quality data on companies' exposure to and management of deforestation risk. We have found that using a combination of data from Forest 500 and Trase allows us to identify companies at risk in our portfolio and to develop company-specific engagement strategies.

– Vemund Olsen, Senior Sustainability Analyst, Storebrand Asset Management

The SEI Foundation Annual Report

The SEI Foundation in Sweden (Stiftelsen The Stockholm Environment Institute) consists of SEI Headquarters, SEI Asia, SEI Africa, SEI Latin America and SEI Oxford. SEI Tallinn, SEI US and SEI York are separate administrative entities within SEI with separate reporting requirements.



SEI Executive Director's report

**SEI Foundation
Stiftelsen
The Stockholm
Environment
Institute
802014–0763**

The SEI Foundation includes SEI HQ, SEI Asia, SEI Africa, SEI Latin America and the subsidiary SEI Oxford Office Ltd (registered in UK under company No. 4404220, not consolidated).

SEI Asia, based in Bangkok, Thailand, has a diverse team of multinational experts that integrates scientific research with participatory approaches to co-develop and share knowledge, build partnerships, and influence policy for resilient development. SEI Asia, which was established in 2004, is affiliated to Chulalongkorn University (CU). SEI and CU have inked a long-term agreement until 2023 to foster innovative research, education, and effective policy engagement on development and environmental challenges in Asia, with a focus on Southeast Asia and China.

SEI Africa is based in Nairobi, Kenya and is hosted by World Agroforestry. It collaborates with African governments, organizations and networks, acting as a hub for SEI's engagement across the continent. From its establishment in August 2008 until June 2013, SEI Africa was based at the University of Dar es Salaam in Tanzania. As of July 2013, it is based in Nairobi, Kenya.

Based in Bogotá, Colombia, SEI Latin America is SEI's newest centre. It began operations in 2018. Colombia is an ideal location for investigating the connections between environmental management and development in the post-conflict era and for sharing insights on land use, air quality, water resources and ecosystems across the region.

The global institute also includes SEI Tallinn (The Estonian Institute for Sustainable Development, established in 1992 and registered in Estonia as an independent non-profit foundation with reg. no. 90000966), SEI US (Stockholm Environment Institute U.S., Inc. registered 2006 in Massachusetts with EIN 20-4659308 as a 501c3 non-profit organization) and SEI York in the UK (with a hosting agreement with the University of York).

The financial statements on the following pages refer to the SEI Foundation only, registered in Sweden with organization number 802014-0763.

Operations

SEI is an international non-profit research institute established in 1989 by the Swedish Parliament. SEI's vision is "A sustainable, prosperous future for all" and its mission is "To support decision-making and induce change towards sustainable development around the world by providing integrative knowledge that bridges science, policy and practice in the field of environment and development". SEI has its headquarters in Stockholm (Sweden) and centres in Bangkok (Thailand), Boston, Davis and Seattle (US), Oxford and York (UK), Tallinn (Estonia), Nairobi (Kenya), and Bogotá (Colombia).

Key developments in 2021

The annual core funding from the Swedish Government and the five-year agreement with the Swedish International Development Coordination Agency (Sida) jointly provide the financial basis for our operations. This core funding, which constituted approximately one third of the SEI Foundation's turnover in 2021, enables SEI to maintain a high level of quality, professionalism, accountability and effectiveness in core functions, as well as invest in strategic research and policy engagements where SEI can work to set agendas, develop capacity and support decision making. It also enables us to adapt our programmes to respond to emerging challenges and policy demand around the world.

In 2021, SEI had relatively strong growth, with a gradually increasing portfolio of externally funded project work, particularly through grants. To support the institute's core functions, SEI received core support from the Swedish Government and additional core support from Sida under a new five-year agreement that was established in 2020. A majority of the funding is project income from research council grants, commissioned research and international collaboration projects from a variety of sources.

In 2021, the government's core support was SEK 34 million, of which SEK 9 million were dedicated to co-funding. Co-funding enables SEI to carry out research programmes that require matching funds while also strengthening the financial sustainability of the SEI centres.

The agreement with Sida supports our activities in developing countries via our centres, strategic regional and policy engagements and SEI Initiatives and enables us to respond rapidly to requests from developing country governments that may not have the means or resources to develop project-funding mechanisms for smaller interventions.

The total revenue of the SEI Foundation in 2021 was SEK 261 million, with a net income of SEK 3 million.

In 2021, SEI Headquarters, which has had several years of growth in personnel and turnover, reorganized its research units. Replacing the four previous units, we established three divisions, each with three or four research teams with a clear thematic focus and research strategy. This organizational change was made to better prepare the institute for capturing new opportunities and improving conditions for innovation in research, as well as staff development.

Further organizational developments include improvements and consolidation of the organizational risk management process and monitoring, evaluation and learning routines and systems – for example through investing further in the Knowledge Management Hub on the intranet and conducting webinars and training sessions.

We were also happy to welcome two new Board members in November 2021: the new Chair of the Board Isabella Lövin and Board Member Magnus Billing.

In 2020, SEI was ranked as the No. 2 think tank in the world on environment policy in the annual index compiled by the University of Pennsylvania's Think Tanks and Civil Societies Program. It was the eighth year in a row that SEI was ranked either first or second in the world. In 2021, the ranking process was paused due to the recent passing of the programme lead.

Covid-19 impact

The pandemic impacted on operations throughout the whole year. Financially, it did not have an adverse impact. Project grants were implemented and new ones came in. Some financial savings occurred related to expenditures such as travel and rent. However, in the second year of the pandemic, ever greater focus was placed on employee health and well-being to mitigate risks such as stress, social isolation and lack of motivation and energy. We continued to work actively to identify and mitigate these employee-related risks by paying closer attention to all individuals, training managers who were faced with increased work burdens and responsibilities brought about by Covid-19 restrictions and offering advice and resources to all employees on how to work safely at home.

SEI continued to adapt to the challenges and restrictions with active replanning of projects to adjust to remote working conditions. Actions included reprioritization within projects (shifting from travel to other activities), relocation of field work and pushing the boundaries of what could be achieved virtually rather than in-person. Online connections have been an essential tool for employees to continue to interact with each other and with project partners. We have diversified our use of digital platforms and provided training and support to staff on how to use these. And we have also invested in new digital communications and broadcasting equipment, preparing for a new post-pandemic normal with many more remote conferences and meetings.

However, we can see that the pandemic to some degree negatively affected our results in terms of outcomes and impacts because of strong restrictions on our face-to-face engagement with key partners and audiences and because so many policy processes and meetings were postponed or cancelled.

The SEI Strategy

Reaching objectives and goals

This Annual Report presents examples of SEI's research activities and outcomes and provides evidence of how the SEI Foundation fulfils its objectives according to its statutes, which state the following:

The primary objective of the Foundation shall be to initiate, carry out and disseminate studies and other research on the assessment and development of technologies, policies and related environmental management techniques and strategies for an environmentally sustainable development of society. Within its field of activities, the Foundation shall co-operate with organizations, public authorities, institutions, companies and individuals world-wide.

The objectives as described in the statutes are elaborated in the SEI Strategy, which is the main guiding document for the Institute, and operationalized through annual work plans for each SEI centre.

The current [SEI strategy \(2020–24\)](#) was adopted by the SEI Board in October 2019. It was prepared on the basis of a thorough participatory process across the whole organization, as well as taking in results from two major institutional evaluations carried out by external teams in late 2018. It brings in new features, including a stronger focus on SEI's identity and values, its outcomes and ultimate impacts in society, an articulation of its organizational theory of change, and other features considered critical to be effective in supporting change over the coming years.

The strategy identifies three major impact areas, with 17 specific priorities for change underneath them. The three impact areas are:

- Reduced climate risk
- Sustainable resource use and resilient ecosystems
- Improved health and well-being.

The change stories in the previous section of this report provide concrete examples of SEI's work and achievements in the context of our Strategy's impact areas in 2021.

The strategy also includes ramped up efforts on strategic policy engagement in international agendas

such as the 2030 Agenda, climate, oceans, and biodiversity, the launch of a new generation of core-funded SEI Initiatives and increased efforts to reduce our environmental impact (see below).

A new generation of SEI initiatives was launched in 2020 as part of the new strategy implementation. SEI initiatives, which are developed through a competitive, bottom-up internal process, function as drivers and hubs for research supported by both core and external project funding. They support SEI's further development and growth and catalyse additional external funding, as well as further recruitment.

The scientific impact of SEI's research in terms of the number of citations in other scientific articles shows a sustained positive trend over time. Data on citations from the Web of Science Core Collection indicate that more than 14 811 scientific articles cited SEI research in 2021, a significant increase (up 17%) from 2020. A comparison with the database Scopus, which includes more social science journals, shows a higher number of citations: by this measure, 15 919 articles cited SEI research during 2021, an increase of 29% from 2020. A complementary indicator is whether SEI's research is published in high-impact journals. Though SEI did not publish any articles in *Nature* or *Science* in 2021, a relatively high number of articles and commentaries was accepted by other high impact journal such as *Nature Climate Change*, *Nature Energy*, *Nature Ecology & Evolution*, *Nature Sustainability*, *Lancet Planetary Health*, *Joule* and *Annual Review of Environment Resources*.

As a basic building block for accessibility, we are seeking to publish more of our peer-reviewed journal articles with open access to ensure easier access for institutions and partners, particularly those in developing countries. SEI's own publication series has always been openly accessible. Between 2020 and 2021, the share of our peer-reviewed scientific articles published with open access increased from 72% to 76%, according to Scopus. The fraction of open-access publications stayed at a similar level for Web of Science (76%) compared to 2020. In 2021, the SEI Global Research Committee started an institute-wide learning project covering not just open access principles, but the wider "open science" agenda and how SEI can contribute to it. This project conducted surveys, centre consultations and a literature review. The key recommendations will be reviewed and taken forward in 2022.

Since 2020, we have used Altmetric data to better monitor the citations and mentions of our scientific publications on social media, blogs, news articles, Wikipedia ws and public policy documents. Most mentions (around 88%) are from social media, including Twitter and Facebook, followed by news and blogs, public policy documents, Wikipedia and

academic sources. Twitter mentions of our publications increased significantly in 2021 compared to 2020. The Twitter mentions for all 1617 currently tracked SEI publications stem from almost 21 440 unique Twitter accounts (16 000 in 2020) in 170 countries (160 in 2020).

In 2021, there was a large increase in the number of external reports and publications authored by SEI staff compared to previous years. This is a positive development, indicating progress on our goal to make scientific research more accessible and relevant to a greater range of people. The increase in these types of publications signals that we are acting on the aim to reach policymakers via shorter policy briefs and also to reach other regions of the world by publishing in languages other than English.

One way to monitor societal relevance and policy impact is to measure citations of SEI-authored publications in policy reports. To date, SEI journal articles have mainly been cited by European institutions, UN bodies, the World Bank and other think tanks. However, this monitoring is fraught with difficulty since influence or impact in decision-making at higher levels often occur without clear citations or documentation of source.

Finally, one way to increase the accessibility and relevance of our research and scientific publications in specific regions is to conduct research and co-author publications with universities and other research institutions. Most academic collaborations take place with European institutions, but we are actively working to increase our academic collaborations with institutions in Africa, Asia and Latin America. This includes the University of Nairobi and Chulalongkorn University.

SEI puts a high value on our institutional partnerships, which are long-term. Institutional partners can be research collaborators but also users of our results, strengthening potential for uptake. In 2021, we did not establish additional partnerships, but deepened and/or renewed existing ones such as with KTH Royal

Institute of Technology and Stockholm University, the United Nations Environment Programme (UNEP), the Think Sustainable Europe network of think tanks and the Green Technology Centre in Korea.

Key developments after the year's end

In February 2022, Covid-19 restrictions were lifted in several key SEI locations and we gradually moved into a more hybrid working mode. This transition is continuously monitored, particularly with regard to remote working conditions and employee well-being, but also productivity and innovation.

Expected developments in 2022

The outlook for 2022 is financial stability and overall growth based on increasing project income at most centres. Core support from the Swedish Government through Formas is at the same level as in 2021, including SEK 2 million earmarked for the Leadership Group for Industry Transition, where SEI provides the secretariat and technical support. The funding and secured project base is stable and new and improved risk management and project planning and monitoring systems are in place. In 2022, new investments will be made in monitoring, evaluation and learning processes and systems. We are planning to convene the Global Management Committee in person for the first time in over two years and also conduct a centre visit in conjunction with the Board's in-person meeting in September. On the agenda is a mid-term stocktake of the 2020–24 SEI Strategy and how we are delivering on it, as well as discussion of minor modifications and new orientations and investments to adapt to the rapidly changing world around us.

Financial overview

Key figures for the SEI Foundation	2021	2020	2019	2018	2017
Total revenue (million SEK)	261.2	257.1	242.3	221.1	201.3
Net income (million SEK)	3.0	2.7	2.2	0.9	1.5
Total assets (million SEK)	224.9	200.2	149.0	117.7	103.8
Equity (million SEK)	28.6	25.6	22.9	20.7	19.8
Equity ratio (%)	13%	13%	15%	18%	19%
No. of staff at end of period	201	176	174	152	141

Environmental impact

SEI tackles complex environment and development challenges and does so using a highly collaborative approach with partners across the globe. The nature of our work means there will always be some requirement to travel to engage in policy processes, conduct our work in a participatory manner and collaborate with a global network of researchers and practitioners. This travel comprises a major part of the institute's environmental footprint. At the same time, we strive to carry out our work as sustainably as possible and to do so, we have put in place global policies, centre processes and more effective use of technologies and software for remote meetings.

In 2019, SEI set an emissions reduction goal for work-related air travel. The goal is to reduce emissions by 25% per capita by 2024 compared to 2017 levels. It is mandatory for all centres to monitor and report emissions from air travel. Since 2019, this data is also analysed to inform future decision-making on travel.

The continuing global Covid-19 pandemic meant that 2021 saw SEI with very low air travel emissions.

Nevertheless, it was the first year that all of our flights were reported using our new TR2AIL software that we used to record, reflect and report on air travel. This tool

- allows individuals to self-report and monitor their own air travel emissions and targets
- calculates CO₂e emissions automatically when the user registers trips based on work by researchers at Chalmers University*, encourages reflection on the reasons and justification for travel
- provides a consistent record across all SEI centres that allows for rapid assessment of trends in air travel emissions for internal management processes and external reporting.

Where appropriate, online meetings and remote participation at events are prioritized as the primary mode of international collaboration. This is fundamental, not only to minimize our travel emissions, but also to extend our reach to wider audiences. We invest in software and technology on an ongoing basis to improve online meeting experiences.

All centres have an internal environmental action plan to chart progress on environmental sustainability targets and set out their plans for the coming year.

Note on data and method

2021 was the first year that we used the TR2AIL tool, so this is the first analysis using those data. Prior to 2021, records were compiled by each SEI centre and then combined into a global report. The method used was:

$$\text{CO}_2\text{e(kg)} = 0.15 * \text{distance (km)}$$

We have made some comparisons between our new methods (calculations inside TR2AIL based on Larsson and Kamb 2019, see footnote) and the old one, but also note that 2021 remained a “pandemic year”, so travel was greatly reduced.

A key difference in the new method is its ability to recognize the carbon intensive “take-off” phase, meaning that short-haul flights and multi-stop flights will be weighted more heavily than under the old method.

The SEI Foundation's flight emissions in the past seven years are summarized in Table 1. As indicated for year 2021, the new method calculates our emissions at 1.14 times the old method.

Table 1: SEI Foundation's CO₂e emissions from air travel, 2015 to 2021. For 2021, we reported figures using both the new method for calculating CO₂e from air travel and the old method.

Year	Distance	CO ₂ e new method (tonnes)	CO ₂ e new method (tonnes/FTE)	CO ₂ e old method (tonnes)	CO ₂ e old method (tonnes/FTE)
2015	3.2 million	N/A	N/A	530	5.76
2016	3.4 million	N/A	N/A	517	4.92
2017	3.7 million	N/A	N/A	561	4.96
2018	3.9 million	N/A	N/A	583	4.40
2019	3.6 million	N/A	N/A	543	4.00
2020	0.4 million	N/A	N/A	56	0.36
2021	0.2 million	32	0.18	29	0.17

* Jörgen Larsson and Anneli Kamb 2019. Travel and climate Methodology Report. Version 2.0. Available at: <https://research.chalmers.se/en/publication/519163>

While we expect our emissions to bounce back up from the exceptional pandemic restrictions of 2020 and 2021, we aim to learn from and build upon the significant increase in our capacity to effectively engage and operate remotely that we have seen these past two years.

Human resources

2021 marked the start of the development and delivery of the first executive global leadership programme in SEI, that will continue during spring 2022. The leadership programme is supported and complemented with a global operational leadership programme and both programmes are based on the SEI Leadership Model. Due to the ongoing pandemic there was significant focus on employee safety and wellbeing, as well as remote/hybrid work, which was addressed through sessions on ergonomics and stress. We continued the global offer to all employees to receive continued support via a mindfulness application (Headspace) and increased collaboration with International SOS. A new performance evaluation system has now been implemented at HQ and SEI Tallinn and was also launched in SEI Asia in January 2022, resulting in improved and GDPR-compliant storage of performance and development reviews. The first global People Review was conducted during the year, consisting of Succession and Competence planning, including a global Retain report. Continued focus on qualified and engaged colleagues is supported by the global collaboration within the SEI HR Network, enabling centres to continue to develop needed capacity. The fourth consecutive global mentorship programme with participation from all our centres started in 2021, supporting cross-centre collaboration within SEI.

Significant risks and uncertainties

Since 2020, SEI has had a global risk management framework that is used to identify potential threats to

the organization and define a strategy for eliminating or minimizing the impact of these risks. The framework is operationalized through an annual risk cycle, which includes the following steps: identify, prioritize, assess, respond and monitor. It is integrated into our wider organizational procedures through planning and follow-up in our annual workplans, as well as our quality assurance procedures.

In 2021, four risks were identified as global priority risks for all SEI centres to address, three of which are related to the Covid-19 pandemic:

- Stress and wellbeing, accelerated risk in pandemic
- Employee retainment, accelerated risk in pandemic
- Partner organization risks, targeted through improved due diligence procedures
- Project productivity and delivery risks, accelerated risk in pandemic.

Monitoring and follow-up of these organization-wide risks takes place in centre management teams and the Global Management Committee.

In terms of funding, although we receive project funds from many different organizations, SEI depends on Swedish Government funding for core support. SEI uses the core funding to leverage additional external funding. This is clearly articulated as a goal for the SEI initiatives and increasingly for our regional engagement funds. It remains a priority for SEI to nurture relationships with our core funders while at the same time diversifying our funding base.

The activities of SEI are also exposed to currency risks related to fluctuations in expected and contracted payments in projects.

SEI carries out research and engagement with partners around the world. This involves exposure to risks related to project management and delivery that may ultimately affect the SEI brand. Such risks are regularly addressed through risk management and quality assurance procedures in project planning and implementation. Continuous improvements and investments in competence development – such as developing the institute-wide SEI project model and training in project management – are made to minimize these risks over time.

Appropriation of results

Appropriation of accumulated results (amounts in SEK)

The equity of the SEI Foundation at the beginning of 2021	25 622 364
Net income for the year 2021	3 018 799
Final balance	28 641 163

Financial statements

Income statement

Amounts in SEK	Note	2021	2020
Government grant		34 000 000	34 000 000
External project funding	2	227 025 967	223 094 346
Sundry income	3	137 247	39 517
Total revenues		261 163 214	257 133 863
Personnel costs	4	-117 109 823	-109 522 378
Travel costs in operations		-270 337	-88 132
External costs in projects	5	-115 868 039	-120 319 751
Other costs	5 6	-21 615 028	-20 895 016
Depreciation	7	-1 662 453	-1 515 301
Operating income		4 637 534	4 793 285
Result from financial investments			
Interest income and similar profit items	8	1 876 122	2 280 294
Interest expense and similar loss items	8	-2 622 809	-3 519 603
Income before tax		3 890 846	3 553 976
Tax on the result for the year	9	-872 047	-827 284
Net income		3 018 799	2 726 692

Balance sheet

	Note	2021	2020
Assets			
Fixed assets			
Intangible fixed assets		491 280	773 809
Tangible fixed assets		2 785 348	2 423 486
	7	3 276 628	3 197 295
Financial assets			
Investments in group companies	10	1 439	1 439
Other long-term receivables	11	1 250 000	1 250 000
		1 251 439	1 251 439
Total fixed assets		4 528 066	4 448 734
Current assets			
Current receivables			
Accounts receivable customers		7 686 040	2 308 285
Prepaid tax		2 483 186	2 245 120
Other receivables		672 904	810 482
Prepaid expenses and accrued income	12	16 498 229	10 981 623
		27 340 359	16 345 510
Cash and bank balances		193 077 111	179 428 591
Total current assets		220 417 471	195 774 101
TOTAL ASSETS		224 945 537	200 222 835
Equity and liabilities			
Equity			
Balance brought forward		25 622 363	22 895 672
Net income for the year		3 018 799	2 726 692
		28 641 163	25 622 364
Current liabilities			
Advance payments for work in progress	13	160 716 321	135 149 567
Accounts payable suppliers		7 719 175	9 530 383
Liabilities SEI centres/affiliated companies abroad	14	6 699 312	11 264 832
Other liabilities		3 803 498	3 913 146
Accrued expenses and deferred income	15	17 366 069	14 742 543
		196 304 374	174 600 471
TOTAL EQUITY AND LIABILITIES		224 945 537	200 222 835

Cash flow statement

	Note	2021	2020
Net income from operations		3 018 799	2 726 692
Non-cash items (depreciation)	7	1 662 453	1 515 301
Net cash generated (used) in operating activities before changes in operating assets and liabilities		4 681 252	4 241 993
Increase (-) / decrease (+) in short-term receivables		-10 994 849	-1 623 020
Increase (+) / decrease (-) in short-term liabilities		21 703 903	48 484 716
Cash flow before investments		15 390 306	51 103 690
Investing activities			
Deposited as collateral with the landlord	11	-	-
Capital expenditures (acquisition of equipment)	7	-1 741 785	-1 032 857
Proceeds from the sale of equipment		-	-
Net cash provided by investing activities		-1 741 785	-1 032 857
Net cash flow after investing and financing activities		13 648 520	50 070 833
Cash at beginning of year		179 428 592	129 357 759
CASH AT END OF YEAR		193 077 112	179 428 592

Notes to the financial statements

Note 1: General accounting principles

The financial statements have (since 2014) been prepared in accordance with BFNAR 2012:1 Annual Report guidelines (K3) issued by the Swedish Accounting Standards Board.

Accounting currency

The Annual Report is presented in Swedish kronor (SEK) and the amounts are in SEK unless otherwise stated.

Valuation principles

Assets and liabilities have been valued at acquisition value if not otherwise stated below.

Revenues

Percentage of completion method is applied to all those projects whose outcome can be satisfactorily calculated. Revenues from projects carried out on a current account basis are recognized in the income statement at the pace of completion. The degree of completion of a project is determined by comparing costs incurred to date with the estimated total contract costs. If it is probable that total project costs will exceed total contract revenue, the expected loss is immediately recognized as an expense in full. If there is significant uncertainty regarding payment or associated costs, no revenue is recognized.

Fixed assets

Fixed assets are recognized as assets if it is probable that economic benefit will accrue at a future date and if the acquisition value of the asset can be measured reliably. Fixed assets are recognized at cost less accumulated depreciation based on estimated economic useful life.

The following principles for depreciation have been used:

Computers	36 months
Other tangible fixed assets	60 months
Intangible fixed assets	60 months

Leasing

All leasing agreements are classified as operational leasing which implies that lease payments are expensed on a straight-line basis over the lease term.

Asset impairment

The carrying values of the Foundation's assets are reviewed at every closing date to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable value is estimated. An impairment loss is charged to the income statement. The recoverable value is the greater of fair market value less costs to sell and value in use.

Income tax

As a Foundation under Swedish law, the Foundation is liable for income tax at a current rate of 20.6%.

Receivables

Receivables have been individually assessed and are reported at the amount expected to be received.

Receivables and liabilities in foreign currency

Receivables and liabilities denominated in foreign currencies are translated to the accounting currency at the exchange rate prevailing at the balance sheet date. Exchange differences arising on translation are recognized in the income statement.

Employee benefits

The Foundation's pension plans include both defined contribution pension plans and defined benefit pension

plans. Obligations for all pension plans are recognized as expenses in the income statement as incurred.

Group accounting

The Foundation, as a parent company to SEI Oxford Office Ltd according to Note 7, does not set up group accounting, applying 3§, chapter 7 of the Annual Accounts Act.

Estimates and assumptions

In the preparation of the financial statements it is necessary for management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, revenues and expenses. Actual results may differ from these estimates. Those estimates and assumptions that can imply a risk for significant adjustments in accounted values are primarily valuation of work in progress in projects.

Incurred events within the Foundation or its environment may make it necessary to revise these estimates and assumptions. On an annual basis a review is made to determine whether there is any indication that the value of assets is lower than the accounted value. In such a case the asset's recoverable value is estimated, equal to the greater of fair market value less costs to sell and value in use.

Note 2: External project funding

External project funding received from the following sources:	2021	2020
Development agencies	50.61%	48.70%
Governments	14.65%	21.86%
Research councils	14.06%	9.60%
Foundations	10.68%	12.01%
Multilateral (EU, UN)	6.49%	6.59%
Private sector	1.38%	0.60%
Developments banks	0.20%	0.44%
Other	1.94%	0.21%
	100.00%	100.00%

Note 3: Sundry income

	2021	2020
Reimbursement of travel and other expenses	130 515	39 517
Miscellaneous	6 731	–
Total	137 247	39 517

Note 4: Employees and personnel expenses

Average number of employees (FTE)	2021	2020
Sweden	105	94
(of which men)	36%	41%
Thailand	37	36
(of which men)	35%	33%
Kenya	14	11
(of which men)	53%	44%
Colombia	18	15
(of which men)	48%	47%
Total	174	156
(of which men)	39%	40%

Board of Directors and management	2021	2020
Board of Directors number of members	7	7
(of which men)	57%	43%
Global Management Committee number of members	17	16
(of which men)	47%	50%

Salaries, other remunerations and social fees	2021	2020
To the Board members and Executive Director	1 343 650	1 331 300
To other employees	82 422 215	78 319 163
Total	83 765 865	79 650 463
Social fees	33 795 622	30 716 662
(of which pension costs)	(8 776 607)	(8 121 489)
SEK 505 541 of the pension costs relate to the Executive Director		

Salaries and other remunerations by country	2021	2020
Sweden	57 876 639	52 599 719
Thailand	16 259 486	18 297 856
Kenya	5 676 987	4 883 385
Colombia	3 952 753	3 869 503
Total	83 765 865	79 650 463

Terminal benefit

The Executive Director is entitled to a severance settlement amounting to one year's salary.

Note 5: Audit fees

	2021	2020
Audit fee statutory audit	401 876	211 663
Audit fees project audits	409 231	438 441
Total	811 107	650 104

Note 6: Leasing agreements

Leasing costs	2021	2020
Office premises Stockholm	6 417 374	6 198 825
Office premises Bangkok	692 467	1 121 957
Office premises Nairobi	465 277	484 695
Office premises Bogotá	168 839	199 231
Copy machines	58 243	70 154
Total	7 802 200	8 074 863
Future minimum leasing costs to be paid for contracted agreements:	2021	2020
Within one year	6 978 786	6 752 741
Later than one but within five years	12 416 852	3 556 498
Later than five years	–	–

Additional information on leasing agreementsOffice premises Stockholm

Base office rent from January 2022 is SEK 4 800 000 per year for a total space of 1182 sqm. The agreement includes a clause on index regulation and is valid until 31 December 2024. There is a fixed discount of SEK 300 000 in 2022 and SEK 150 000 in 2023. Total costs in the agreement include heating, cooling, waste disposal, electricity, archive rent and property tax. At 2021-12-31, contracted nominal future payments are SEK 15 785 262 excl. VAT and index adjustment.

Office premises Bangkok

Rent is THB 450/month/sqm for a total space of 817,79 sqm. The agreement is valid until 31 March 2024. At 2021-12-31, contracted nominal future payments are THB 9 936 149 (= SEK 2 694 684).

Office premises Nairobi

Rent is USD 31/month/sqm for a total space of 146.42 sqm. The agreement is valid until 30 June 2023. At 2021-12-31 contracted nominal future payments are USD 81 702 (= SEK 738 892).

Office premises Bogotá

Rent is COP 44 017/month/sqm for a total space of 145 sqm. The agreement is valid until 30 November 2022. At 2021-12-31, contracted nominal future payments are COP 60 500 000 (= SEK 137 500).

Copy machines

The agreement is SEK 3 930 per month excl. VAT. The agreement is valid until October 2022. At 2021-12-31, contracted nominal future payments are SEK 39 300 excl. VAT.

Note 7: Tangible and intangible fixed assets

	2021	2020
<i>Gross value</i>		
Opening balance	16 009 810	14 976 953
Acquisitions	1 741 785	1 032 857
Sale	-	-
Discarded	-	-
	<u>17 751 596</u>	<u>16 009 810</u>
<i>Accumulated depreciation</i>		
Opening balance	-12 812 515	-11 297 214
Sale	-	-
Adjustment	-	-
Depreciation charged	-1 662 453	-1 515 301
	<u>-14 474 968</u>	<u>-12 812 515</u>
Net book value	3 276 628	3 197 295

Note 8: Result from financial investments

	2021	2020
Interest revenue and expense		
Interest revenue	4 065	4 516
Interest expense	-21 986	-6 578
	<u>-17 920</u>	<u>-2 062</u>
Exchange rate gains and losses		
Exchange rate gains	1 872 056	2 275 778
Exchange rate losses	-2 600 824	-3 513 025
	<u>-728 768</u>	<u>-1 237 247</u>

Note 9: Tax

	2021	2020
Current tax	-872 047	-827 284
Deferred tax	-	-
Total	-872 047	-827 284
Theoretical tax		
Income before tax	3 890 846	3 553 976
Tax at current tax rate, 20.6% (2020 = 21.4%)	-801 514	-760 551
Reconciliation of effective tax		
Effect of non-deductible expenses	-70 533	-66 733
Effect of tax-exempt income	-	-
Utilization of tax value of loss carryforwards not previously recognized		
Adjustment for taxes pertaining to previous years	-	-
Total	-872 047	-827 284

Note 10: Investments in group companies

Companies/corporate identity number/registered office	Nominal value one share	Number of shares	Share (%)	Book value
SEI Oxford Office Ltd 4404220 Oxford	£1	100	100	1 439

The SEI Oxford result after taxes for the year 2021 is a deficit of -£6637 = SEK -80 832 (Year 2020: £82 149 = SEK 910 811)

The equity as at 31 December 2021 is £806 911 = SEK 9 827 369 (31 December 2020: £813 548 = SEK 9 020 051)

Note 11: Other long-term receivables

Deposit according to the contract with SEI's landlord Vasakronan Fastigheter, for the duration of the lease of the office premises (currently until 2024-12-31). The deposited amount will earn interest* income which belongs to SEI and will be repaid to SEI together with the deposited amount upon termination of the lease.

* The amount deposited with Vasakronan's bank account with Handelsbanken, with interest currently STIBOR T/N minus 0,6%.

Note 12: Prepaid expenses and accrued income

	2021	2020
Prepaid rent	1 622 060	1 586 249
Advance payments to project partners	12 479 962	7 827 987
Other prepayments	2 396 207	1 567 387
Total	16 498 229	10 981 623

Note 13: Advance payments for work in progress

	2021	2020
Work in progress costs incurred	-794 276 210	-782 935 148
Accrued interest revenue on advances (specified per project)	21 937	21 937
Deductible: advance payments	954 970 594	918 062 778
Total	160 716 321	135 149 567

The balance is reported as a liability since the advance payments are higher than the accrued income. Interest income, accrued as a general liability on advance payments, is included in Other liabilities.

The advance payments liability includes an amount of SEK 3 808 242 which is part of the government core grant earmarked for co-funding (SEK 9 million in 2021) and allocated to projects, but not yet fully utilized according to the principles of accrual.

Note 14: Liabilities SEI centres/affiliated companies abroad

	2021	2020
SEI Tallinn	606 809	377 605
SEI US	4 557 747	7 079 604
SEI Oxford	1 534 756	3 807 623
Total	6 699 312	11 264 832

Note 15: Accrued expenses and deferred income

	2021	2020
Accrued holiday pay	6 505 561	6 556 247
Accrued salaries and social charges	4 525 694	4 334 400
Sundry accruals	6 334 814	3 851 896
Total	17 366 069	14 742 543

Note 16: Pledged assets and contingent liabilities

Pledged assets	2021	2020
Floating charge	1 000 000	1 000 000

Contingent liabilities

According to the renewed agreement* signed with the University of York, describing the co-operation between the SEI Foundation and the University, which is hosting SEI York, the SEI Foundation and the University jointly undertake to underwrite all eligible cost 50/50, sharing the operational risk of a shortfall. To the extent permitted by law, each Party's aggregate liability to the other Party under or in relation to the Agreement shall be limited to £350 000.

* Agreement valid for an initial period of 1 August 2021 to 31 July 2026.

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