CLIMATE ANALYTICS

2019 ANNUAL REPORT

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Cover photo: Tabernas Desert of Andalusia, Spain

Message from the CEO

Climate Analytics CEO Bill Hare presenting at the Western Australia's 2019 State Natural Resource Management and Coastal Conference, which was held at Edith Cowan University, Joondalup from 1 October – 4 October. Photo by Ursula Fuentes Hutfilter/Climate Anayltics.

At Climate Analytics, 2019 was a year of growth: we established valuable new partnerships and embarked on exciting, multi-year projects. The goals of these projects range from deepening the scientific understanding of interactions between land and climate, to deriving Paris Agreement-compatible pathways for individual countries. We expanded our collaborations with vulnerable nations on developing and financing their climate plans. And as part of this growth, all our teams welcomed new members to broaden our expertise and engagement in scientific and policy issues of key importance to Small Island Developing States (SIDS) and Least Developed Countries (LDCs), whom we have had the privilege to support over the last decade as they continue to push for more climate ambition.

Governments agreed in Paris in 2015 that they would submit more ambitious emission reduction commitments by 2020, informed by IPCC science. By late 2019, and in particular at the Madrid climate summit, it became very apparent that momentum towards increased ambition was flagging dramatically.

The urgency of reducing emissions was underscored by intensifying climate extremes: the severe European heat wave, record temperatures in the Arctic, the second strongest Atlantic hurricane ripping through the Caribbean, an extremely rainy monsoon in India, and the devastating wildfires that engulfed much of eastern Australia.

Against this backdrop of yet another year of severe climate change impacts, two Special Reports from the IPCC, authored by the world's top climate scientists, assessed new evidence of how global warming affects land, oceans and ice, reinforcing the urgency, and also the feasibility, of getting onto a 1.5°C pathway that would prevent the worst of climate change impacts.

The multi-faceted work of our science team ranged from unpacking latest IPCC science for SIDS and LDCs in a series of workshops in the Caribbean, West Africa and the Pacific, to presenting cutting-edge science at key scientific conferences, and embarking on new major projects with the aim of advancing the understanding of climate science, so that it can better inform policy making.

And as in many years past, the most vulnerable countries continued to lead by example, making the use of latest available science to underpin their commitment to ambitious climate goals.

At the UN Secretary-General's Global Climate Action Summit (UNCAS) in September, these vulnerable developing countries reaffirmed their intent to reduce their greenhouse gas emissions to net zero by 2050, with many also committing to revising their emission reduction targets in line with the 1.5°C limit in the Paris Agreement.

But the call of the UN Secretary-General Antonio Gutiérrez on big emitter countries in particular to deliver on their Paris Agreement obligations with commitments to bring forward more ambitious climate targets by 2020 went unanswered.

Nevertheless, we also saw positive developments, such as the rapidly decreasing costs of renewable technologies, which continue to beat trend projections. The increasing proportion of the global GDP that is now covered by some kind of a net zero target shows that climate action is going forward in new ways. Economic factors alone should be enough to convince governments to put forward stronger carbon cutting commitments, as the Paris Agreement requires them to do every five years, and which are due in 2020.

Climate Analytics continued in 2019 to produce cogent analysis on the necessity, feasibility and benefits of decarbonisation in line with the 1.5°C limit, which reaches wide audiences through media coverage, direct outreach to key stakeholders, workshops, presentations and events and important international meetings such as UN conferences and regional climate weeks.

The Climate Action Tracker, the well-established assessment of climate action we carry out with the NewClimate Institute, issued two temperature updates, warning that the continued lack of progress puts the world on track for 3°C warming. But it also released a number of detailed studies that show how selected countries can scale up decarbonisation in key sectors and improve climate governance.

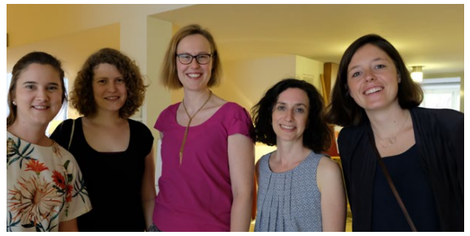
In a major report on decarbonising South and South East Asia, we showed how these growing economies could shift focus from current carbon-intensive plans to renewables to meet their increasing energy needs, and reap the benefits of a zero-carbon economy while making a necessary contribution to meeting Paris Agreement objectives.

Coal phase-out continued to be firmly in our sights, too, with a key analysis, produced for the UN Secretary General's Summit, showing that to be in line with the Paris Agreement, this climate-damaging fossil fuel must be phased out by 2040 globally, with OECD and Eastern European countries needing to do so by 2030. Building on these benchmarks, we released a number of publications outlining Paris-compatible pathways for countries that rely heavily on coal for electricity production, while pointing to the multiple benefits of an energy transition to renewables and other clean forms of energy.

While international climate negotiations made seemingly little headway on the rules for implementing the Paris Agreement, our climate diplomacy experts continued their work to support representatives of SIDS and LDCs on the political push for increasing climate ambition and in the international negotiation of outstanding key elements of the Paris rulebook, such as the hotly contested Article 6 rules on carbon markets. Our climate finance experts also continued work with representatives of vulnerable countries to ensure that the Green Climate Fund provides a sustainable, adequate and accessible source of funding for SIDS and LDCs to implement their climate plans and strategies.

At COP25 in Madrid, SIDS and LDCs stood up effectively to a coalition of countries intent on blocking progress on aspects that are essential for the success of the Agreement. This was particularly visible in an attempt by a small group of countries to be allowed to rely on old Kyoto Protocol units for use towards meeting obligations under the Paris Agreement, which would dilute efforts to cut emissions. Our report on Australia's proposed use of these "Kyoto carryover" units, which hit the headlines during the Madrid summit, exposed that there is currently no legal basis for using these units under the Paris Agreement, thus helping to put the issue in the international spotlight.

The support provided to SIDS and LDCs is grounded in the latest science and is delivered in the form of regional workshops and strategy meetings of ministers and high-level officials, on-demand briefings, and endless hours of real-time support in negotiating rooms, all aimed at helping to defend and advance their interests.



Climate Analytics COO Henrike Doebert (centre) with (from left): Project Manager Hannah Kügler; Annika Guenther, a researcher at the Potsdam Institute for Climate Impact Research (PIK), Climate Analytics' Head of Project Management, Amandine Berger; Research Analyst Emily Theokritoff. Photo by Climate Analytics.

One of the areas of policymaking which is extremely important to vulnerable countries relates to preparing for climate impacts. Effective climate adaptation measures must be based on scientific information, and our scientists have been collaborating with regional scientific institutions, government agencies and implementing bodies to make use of the latest science in devising adaptation plans and to produce online climate tools to help design nationally-appropriate measures.

Accessing international funds earmarked for climate adaptation in these vulnerable countries, along emission reduction plans, represents a major obstacle. To complete the cycle, our implementation strategies team has supported a number of governments in the Caribbean and Africa, to build capacity in their key institutions to enable access to climate finance, as well as involving the private sector in building climate-resilient societies.

The growth in the breadth of our work and scope of our analysis, the expansion of our team across all our offices, and the acquisition of new projects would not have been possible without the combined forces of our able, dedicated operations team - project development and management, human resources, finance and administration staff.

The main challenge in 2020 is to rebuild economies from the global coronavirus pandemic, and with it the push for increasing climate ambition, and for the major emitters to step up and meet this challenge in line with the goals of the Paris Agreement. We know ambition increases are more than possible, with renewable energy prices and costs continuing to drop rapidly globally making the zero carbon transition ever more cost-effective and beneficial. This is the challenge now ahead of all of us in 2020 and in particular for our political leaders.

Bill Hare
CEO and Senior Scientist

Scope of our work

AFRICA

- National Adaptation Plan (NAP) process, implementation and financing strategies
- Adaptation and Disaster Risk Management (DRM)
- Multi-Sectoral Investment Plans for Climate and DRM
- Economic impacts of climate variability
- Forests and governance
- Interative data tools RegioCrop and REgioClim

SUPPORT TO LDCs

- Climate Diplomacy (UNFCCC)
- NDC formulation, update, revision and implementation
- NAP implementation
- NAP process financing strategy
- GCF and climate finance readiness

SUPPORT TO SIDS

- Climate Diplomacy (UNFCCC)
- NDC formulation, update, revision and implementation
- NAP implementation
- NAP process financing strategy
- GCF and climate finance readiness

EUROPEAN UNION

- Coal phase-out for the EU
- EU 2020 Strategy: Water, Agriculture, Low-carbon Economy, Climate Change and Food security
- Analysis of results and implications for pathways and policies for low-emissions European societies
- Mitigation options for key sectors including transport and buildings

1.5°C GLOBAL ANALYSIS

- 1.5°C science: global impacts, risks and action needed
- Coal phase-out to meet the Paris Agreement temperature limit
- Real world decarbonisation progress, future potential of sectors and strategies to meet these potential carbon reductions
- Sea level rise analysis

ASIA

- Coal phase-out to meet the Paris Agreement temperature limit
- Energy transformation
- Co-benefits analysis

AUSTRALIA

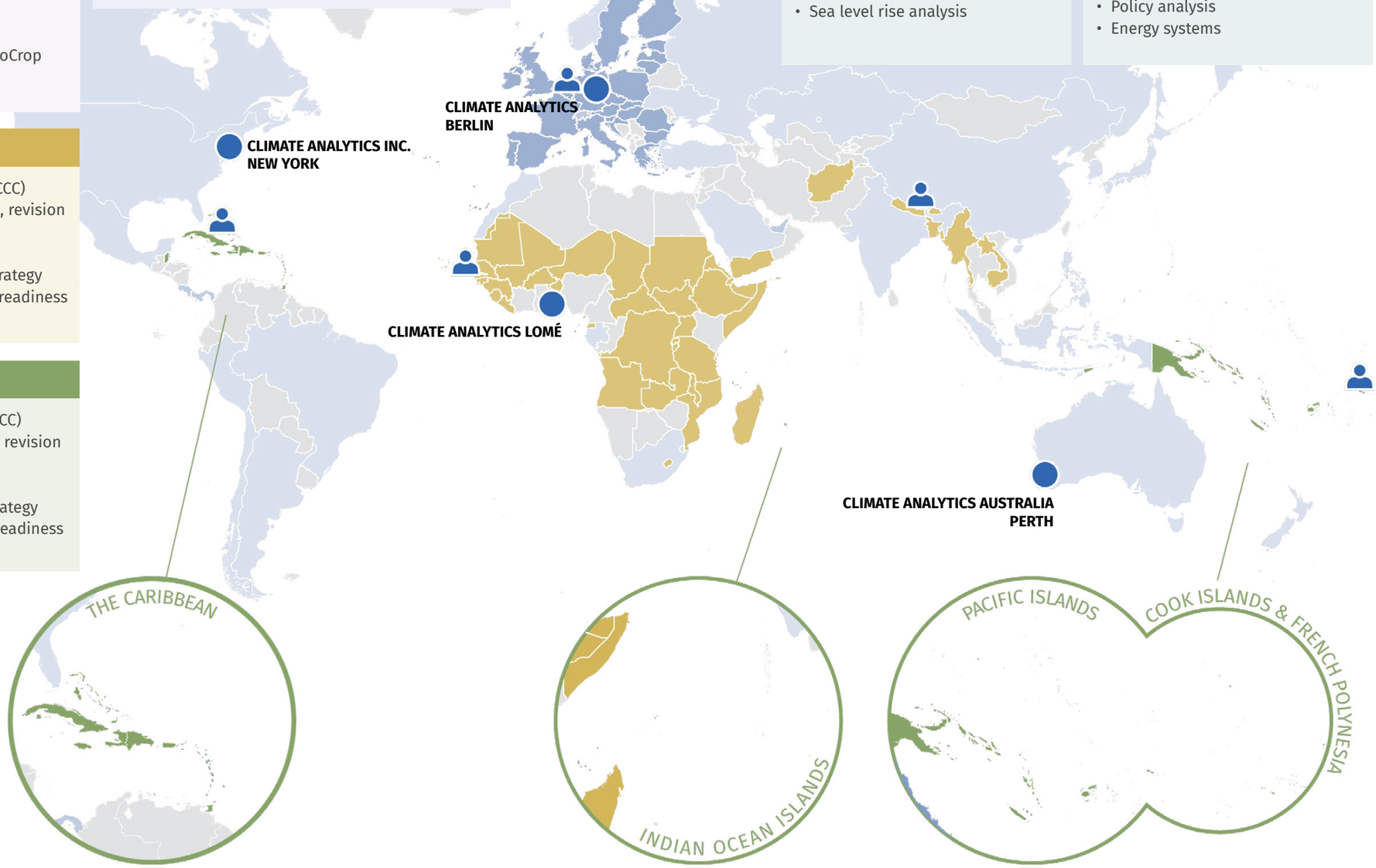
- Policy analysis
- Energy systems

THE CLIMATE ACTION TRACKER

This scientific analysis tracks climate action and efforts towards the globally agreed long-term temperature goal. It tracks 32 countries, including all the biggest emitters and a representative sample of smaller emitters, covering about 80% of global emissions and approximately 70% of global population.

- Track and evaluate individual country actions
- Aggregate individual country efforts to a global result/effort
- Compare efforts of individual countries
- Policy analysis and recommendations
- NDC target analysis
- Track sectorial decarbonisation trends
- Provide data to the public

ClimateActionTracker



LDCs Least Developed Countries

SIDS Small Island Developing States

European Union

Climate Action Tracker Countries

Leading research on 1.5°C

A better understanding of the complex interrelations between land, land cover, the oceans and the atmosohere can help to us find ways to keep warming within 1.5°C above pre-industrial levels. Photo by Veeterzy/Unsplash.

Rapid carbon emission cuts are crucial to preventing the worst impacts of climate change – this is the repeated message from the world's top body of climate scientists, the Intergovernmental Panel on Climate Change. Our institute undertakes extensive research around the 1.5°C warming limit in the Paris Agreement in order to improve and broaden the science base needed for policymakers to set ambitious climate targets and to underscore how important it is to act early.

Our scientists lead and contribute to cutting edge research projects dealing with understanding the severity and costs of climate impacts, including weather extremes, at higher levels of warming. Our researchers are also breaking new ground in our understanding of how much adaptation to climate impacts is possible and what are the barriers, presenting their research at key scientific conferences, such as the European Geosciences Union.

Improving climate projections for the next decades

By signing the Paris Agreement, governments recognised that in order to avoid the worst impacts of climate change, global temperature rise should be limited to 1.5°C above pre-industrial levels. However, predicting how the climate will change over the next 20 to 50 years, as well as defining the emissions pathways that will set and keep the world on track to meet this goal, requires a better understanding of how several human and natural factors will affect the climate in coming decades. These include how atmospheric aerosols affect the Earth's radiation budget, and the roles of clouds and oceans in driving climate change.

Climate Analytics is part of a major EU-funded Horizon 2020 project "Constraining uncertainty of multi-decadal climate projections" (CONSTRAIN), which addresses these crucial knowledge gaps. Its findings are synthesised in a series of yearly "Zero in" reports. The first report, launched at COP25 in Madrid, zeroed in on the remaining carbon budget as well as projected surface warming rates over the next 20 years. Both topics are crucially important to the implementation of the Paris Agreement.

Report: CONSTRAIN, 2019: ZERO IN ON the remaining carbon budget and decadal warming rates. The CONSTRAIN Project Annual Report 2019, DOI: https:// doi.org/10.5518/100/20

Rapid decarbonisation and sustainable development

Delivering on the Paris Agreement requires societies around the world to decarbonise rapidly. To be successful, such rapid decarbonisation should be embedded in the UN sustainable development agenda. Another EU-funded Horizon 2020 project, which kicked off in September 2019, "Next generation of AdVanced InteGrated Assessment modelling to support ClimaTE Policy Making" (NAVIGATE) aims to improve how Integrated Assessment Models account for distributional impacts of climate change and describe transformative change in the economy.

This collaboration of 17 universities and institutes aims to deliver insights into how long-term climate goals can be translated into short-term climate policy measures and how different countries and sectors can work together to implement the Paris Agreement. Our researchers contribute work on climate impacts, co-benefits and links with the UN Sustainable Development Goals (SDGS). Synergies and trade-offs between climate action and the human development goals will aim to capture distributional impacts and inequality, allowing for identification of potential tensions between climate policies, the SDGs and climate change impacts.

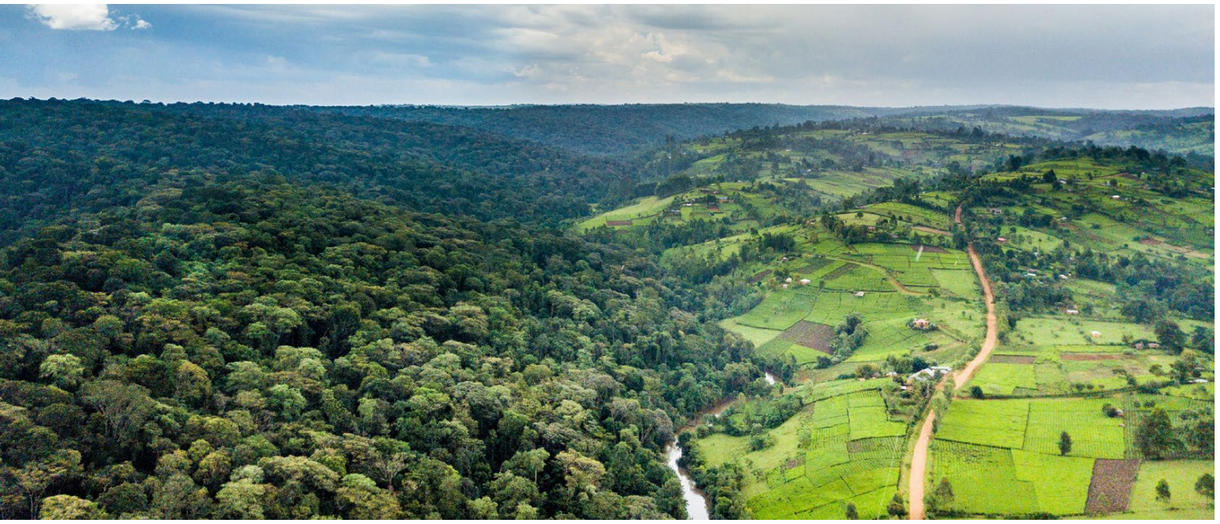
Climate Analytics' Lead Science Advisor, Dr Michiel Schaeffer, speaking at event during the UN climate summit in Bonn in June 2019. Photo by Marc Hall/Climate Analytics.

Land management for climate mitigation and adaptation

Changes in land cover and land management that are driven by human activities, such as agriculture or forestry, have a considerable effect on the global climate through the release of carbon into the atmosphere, changing local energy and water fluxes on the Earth's surface and their interaction with large-scale atmospheric dynamics.

In September 2019, a number of our scientists started work on a new, exciting project carried out with six institutes. The three-year project – LAMACLIMA - will investigate how changes in land cover and land management can help to meet the mitigation and adaptation objectives of the Paris Agreement, as well as the Sustainable Development Goals.

The results will be presented in an open-access, user-friendly tool, which will be developed in consultation with regional-level adaptation planners and development actors as well as international institutions, environmental organisations and relevant private actors during dedicated workshops and online collaboration.



ABOVE: A forest adjacent to agricultural land in Mau, Kenya. Forests and managed land are closely connected to the climate via a complex web of interactions. Photo by CIFOR/Flickr (CC2.0)

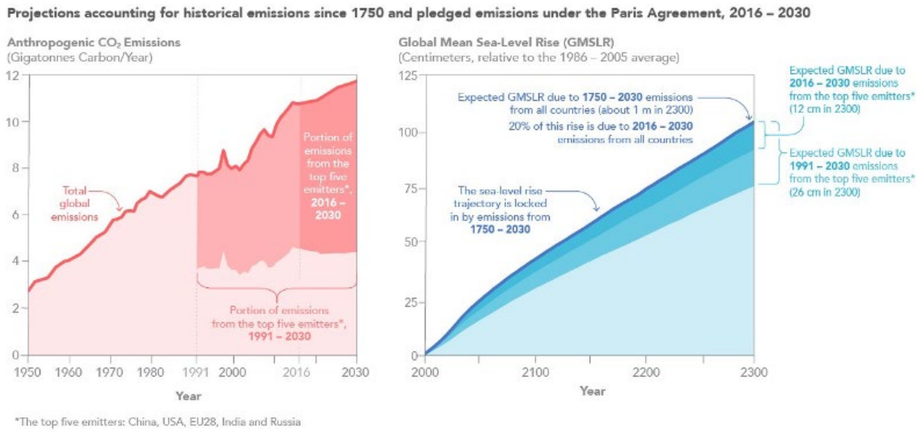
BELOW: Illustration of projections accounting for historical emissions since 1750 and pledged emission under the Paris Agreement 2016-2030. Graphic by Lucy Reading-Ikkanda

New science - a selection

Climate inaction means additional sea-level rise

The slow pace of emission cuts we are seeing now will have enormous consequences for future sea level rise. A study led by one of our scientists, Dr Alex Nauels, shows that unless governments significantly scale up their emission reduction efforts, the 15 years' worth of emissions released under their current Paris Agreement pledges alone would cause 20 cm of sea-level rise over the longer term. Just over half of that 20 cm contribution can be attributed to the top five polluters – China, USA, EU, India, and Russia. The emissions released by these five countries under their current Paris Agreement pledges (NDCs) will cause seas to rise by 12 cm by 2300.

STUDY: "Attributing long-term sea-level rise to Paris Agreement emission pledges," Nauels et al. PNAS, 2019-07461RR



More persistent heat, drought and rain in a warming world

Europe, North America and parts of Asia can expect not only more intense but also longer lasting periods of heat, drought and rain during summer as the planet warms, worsening impacts on health and agriculture. The study, led by researchers from Climate Analytics and Humboldt University of Berlin, found that if the world warms to 2°C above preindustrial levels, we could see a significant shift in summer weather conditions from the patterns we know today. Extreme weather would become more persistent – hot and dry periods, as well as consecutive days of heavy rain would all get longer. However, limiting global warming to 1.5°C above pre-industrial levels in line with the Paris Agreement would largely avoid these additional impacts.

STUDY: "Summer weather becomes more persistent in a 2°C world," Pfleiderer, P. et al. (2019); Nature Climate Change, doi: 10.1038/s41558-019-0555-0

Governance is a key ingredient of a country's capacity to adapt to climate change

Good governance is important for long-term planning, guidelines and regulations, and can be crucial for governments in successfully leveraging investments in adaptation projects. Conversely, a lack of transparency, high corruption or political instability could deprive a government of that much-needed finance. Using Shared Socio-economic Pathways and World Governance Indicators, this Climate Analytics-led study showed that even under the most optimistic development scenarios, it will take until around 2050 to overcome weak governance globally. On the upside, countries characterised by very weak governance can improve up to five times faster under the most optimistic scenarios.

STUDY: "Governance in socioeconomic pathways and its role for future adaptive capacity," Marina Andrijevic, et al, Nature Sustainability volume 3, 35–41(2020)

Meet the Experts

Our staff took part in multiple events at the Chile UN climate summit hosted in Madrid, including a 'meet the experts' session. Here, Inga Menke and Dr Andreas Geiges present some of our climate tools, which include the online climate impacts portal ISIpedia, the Climate Action Tracker, the Lowdown on Coal, and tools developed to support climate adaptation practitioners, such as RegioClim, RegioCrop, Adaptation Map and Local Sea Level Rise. Photo by Climate Analytics.

Climate science

Climate Analytics' Dr Adelle Thomas, an IPCC Lead Author, speaks at New York Climate Week in September 2019. Photo by Climate Analytics.

BELOW: Climate Anayltics' Dr Anne Zimmer at the conference 'Understanding Risk in Europe', organised by the World Bank in Bucharest, Romania. As part of the SLICE project, Dr Zimmer gave a presentation on determining disaster and climate impacts on the poorest and most vulnerable and optimising solutions for resilience. Photo by Markus Zimmer (IFO)

Short and long-term impacts of climate extremes

Climate change poses a severe risk globally. The current level of global warming has already almost tripled the share of the global population exposed to extreme climate related events each year. Climate extremes such as floods, tropical cyclones, heatwaves and droughts cause not only substantial direct damages but also have the potential to deteriorate socio-economic development perspectives in the long-term.

The SLICE project, funded by the German Federal Ministry of Education and Research, now in its second year, is investigating the impacts of climate extremes and aims to develop a systematic understanding of the channels through which they impact socio-economic development all the way from the household to the macroeconomic level.

In May 2020, a workshop in Rome, organised by one of the project partners IFO, brought together leading modelling experts with stakeholders from international and national institutions, the re-insurance industry and rating agencies to discuss the needs of stakeholders, and discuss how these can be best addressed by the scientific community.

SLICE Short- and Long-Term Impacts of Climate Extremes
Identifying key impact channels and effective strategies for long-term economic development under climate change

Climate science in the courts

In the last few years, ever more groups have taken governments to court over insufficient action needed to to prevent climate impacts from affecting their lives and livelihoods now and in the future. These court cases are backed by scientific evidence and influenced by advancements in understanding, for instance, how the rise in anthropogenic carbon emissions relate to extreme weather events like droughts or hurricanes, or slow onset events, such as sea level rise, which is referred to as climate attribution science. Thanks to progress in this field, plaintiffs are able to pinpoint and quantify the environmental impact of projects, policies and laws.

In 2019, Climate Analytics has provided the scientific background for a number of climate litigation cases, including the "Children vs. the climate crisis" in which sixteen children from across the world have petitioned the United Nations Committee on the Rights of the Child to hold five of the world's leading economic powers – Argentina, France, Brazil, Germany and Turkey - accountable for inaction on the climate crisis.

The report our scientists produced synthesised the latest science relating to how climate change was already affecting children around the world, with in-depth information on countries and regions the children represented, and how these impacts would increase in the future without significant climate action.

Another case we supported with scientific evidence involved three farming families, who together with Greenpeace Germany, filed a complaint against the German federal government arguing that by failing to meet its 2020 climate target, it is violating its obligation to protect its citizens from the impacts of global warming.

In support of the farmers' claims, a study, lead by Climate Analytics' Peter Pfleiderer showed that Germany's key apple growing regions could suffer up to 10% more frost damage if global temperature rises by 2°C. Climate change is not only causing warmer temperatures and milder winters, it has already shifted the growing seasons of many plants. Observations show that apple trees often blossom earlier than twenty years ago, which puts them at higher risk of frost.

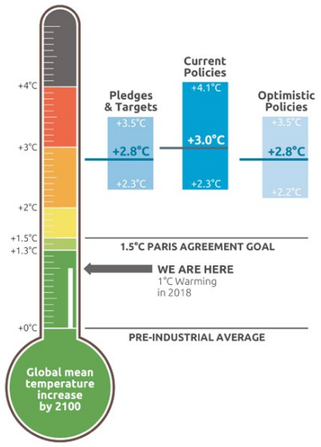
REPORT: Global climate change impacts on children, Inga Menke, Carl-Friedrich Schleussner (2019)

STUDY: Pfleiderer, P., Menke, I. & Schleussner, C. Increasing risks of apple tree frost damage under climate change. Climatic Change 157, 515–525 (2019).

Children marching for climate justice in Minnesota, USA. Photo by Laurie Shaull (CC2.0).

Climate Action Tracker

The Climate Action Tracker, a collaboration with the NewClimate Institute, is a flagship project for Climate Analytics, cited by policymakers and media across the world. It undertook three rounds of government assessments in 2019: in June for the UNFCCC Bonn meeting, again in September for the UN Secretary General's Climate Week, and the main update at the December Madrid COP25.



The Climate Action Tracker thermometer, last updated in December 2019, shows that, at best, the world could bring down warming to 2.8˚C by 2100, still way above the Paris Agreement's 1.5 ˚C limit.

June: some positive steps

The global picture saw an increase in the number of governments beginning to talk about net zero emissions by or before 2050, but the CAT warned that emissions must be halved by 2030 to keep the 1.5˚C goal alive, and governments were nowhere near the action needed.

The US, India and China were responsible for 85% of the global rise in energy-related carbon dioxide emissions over the past year, and renewable energy additions had stagnated after 20 years of strong growth. Methane, a powerful greenhouse gas, had recently accelerated, likely from the increasing emissions from oil and gas production.

The CAT pointed to key governments like the EU, China and India who were all likely to exceed Paris targets and were capable of increasing action. These governments hadn't reached a level of "highest possible ambition. However there were signs of good progress with countries like Costa Rica, Chile and the UK with new targets and actions.

The growth in electricity produced from renewables grew 7% from 2017 to 2018, more than twice as fast as that from fossil fuel-sourced power.

September

As world leaders gathered in New York for the UN Secretary General's climate summit, the CAT released its latest projected warming increase, warning that government policies were likely to breach the 1.5˚C limit by 2035, 2˚C by 2053 and would result in a total warming of 3.2˚C by the end of the century.

Under both the CAT's "current policy" and "Paris pledges and targets" projections, there is a ten percent chance of exceeding 4˚C of warming by the end of the century and up to a 25% chance if current policies are not improved.

Even the CAT optimistic policy scenario, that takes an optimistic view of government policies, and includes those that are planned, warming would still be at 2.9˚C. Climate Analytics CEO Bill Hare warned that the world was "heading to at least twice the warming limit governments agreed four years ago: it's time for them to strengthen their Paris Agreement targets, as promised, and rapidly scale up action at home. We are inching forward, at best."

As part of its update, the CAT took a selection of seven countries: Australia, Chile, China, the EU, India, Indonesia, and Russia, and looked at their 2030 targets under three different scenarios: 1.5˚compatible, what it would take to improve the target to the next level of CAT rating, and its current path.

All had room for improvement, and significant changes were necessary, the CAT warned.

Madrid COP25 update

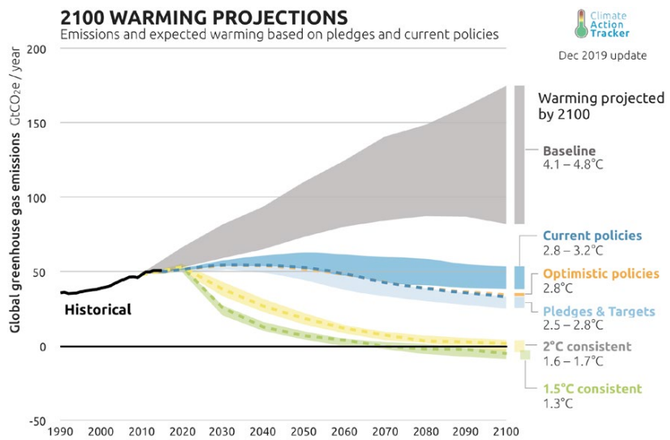
For its Madrid Update, the CAT added four new countries to its analysis: Germany, the UK, Vietnam and Kenya.

Germany's CAT rating came in at "Highly Insufficient" - the government's new Climate and Energy Package agreed in September 2019 did not contain enough policy action to meet its 2020 or 2030 targets, which themselves were outdated and insufficient.

The UK received an "Insufficient" rating and its policy progression looks set to stall in the 2020's as there were no new policies in the pipeline, and the country is unlikely to meet its next carbon budgets. Vietnam's reliance on coal and its plans for a huge expansion of coal into its energy supply was cause for concern, and the CAT rated Vietnam "Critically Insufficient"

Kenya was the pick of the four, rating "2˚C compatible" but the CAT warned that two new planned coal-fired power stations could set the country back.

The CAT's temperature update confirmed that, at best, the world could achieve bringing warming to 2.8˚C by 2100, still way above the Paris Agreement's 1.5˚C limit.



CAT warming projections from its December 2019 update.

Governance

In its new Governance series, the CAT has extended its analysis of government action to evaluate the ability and readiness of national governments to enable the required economy-wide transformation towards a zero emissions society.

The assessment analyses four aspects of governance covering key enabling factors for effective climate action:

- the political commitment of the government to decarbonisation,
- the institutional framework it has put in place to achieve its emission reduction targets,
- the processes it has established to develop, implement and review mitigation policies, and
- its ability and willingness to engage with relevant stakeholders on policy development.

Each country assessment considers the national government and one or two of the highest emitting sectors critical to achieving deep decarbonisation in the country.

The Climate Governance Series seeks to offer a standardised and replicable approach to assessing a government's ability and readiness to achieve the required transformation, highlighting positive developments and areas for improvement. By releasing the first six country reports, the CAT aims to both generate discussion and elicit feedback on the methodology that the CAT seeks to develop further.

The assessments completed in 2019 covered six countries: Argentina, Australia, Indonesia, Kenya, the Philippines and South Africa.

Climate Action Update Tracker

In Madrid, the CAT also launched its Climate Action Update Tracker, tracking the updated Nationally Determined Contributions (NDC's) as they are submitted to the UNFCCC. In Madrid, there were very few who had done so: only the Marshall Islands and COP President Chile. The CAT is continuing to assess and update all newly-submitted NDC's as we track through 2020.

Scaling Up Climate Action

In 2019, the CAT added three more countries to its "Scaling Up Climate Action" series: Turkey, Argentina and Indonesia. In this series, the CAT takes a deep dive into in-country sectoral analysis and, using its "Prospects" modelling developed for the series, identifies the sectors holding the most promise for rapid decarbonisation.

Turkey

We released the Turkey Scaling Up Climate Action report during the Madrid COP, and a translation into Turkish ensured wide pickup in the media.

Turkey has tremendous potential to scale up climate action in the electricity supply, road and rail passenger transport, and residential buildings sectors. Scaling up climate action in these sectors alone, which account for about 50% of Turkey's GHG emissions, can reduce economy-wide emissions by 14% below 2017 levels by 2030, reversing the current upward trend.

Ambitious decarbonisation efforts for these sectors would significantly reduce emissions and foster co-benefits such as business , employment generation (renewable energy), and support for the sustainable development goals.

Turkey's plans for many new coal fired power plants, while still among the world's largest, has decreased in recent years. For a Paris-compatible electricity sector, Turkey needs to phase out coal by 2030, significantly increase the role of renewables in its planning, and establish a sound legislative framework that should include allowing for a high share of variable renewables, and fully decarbonise its electricity generation by mid-century.

Argentina

The Scaling Up Climate Action: Argentina report was released as it hosted the G20, and made numerous headlines, thanks to having a Spanish translation.

We found that Argentina can reduce greenhouse gas emissions of its electricity supply, residential buildings, and land-based passenger and freight transport sectors by up to 94% below 2014 by 2050. Together, these sectors account for around 40% of Argentina's 2014 emissions, and actions in these areas alone would reduce economy-wide emissions by 7% below 2014 levels by 2050, equivalent to 38% below a Current Development Scenario by 2050.

We found that if Argentina was to do this, it could be a global frontrunner in achieving a successful energy transition. But it would still need to take additional action in other sectors such as agriculture and land-use sectors in order to decrease economy-wide emissions by mid-century in line with the Paris Agreement's temperature limit.

Argentina could benefit from large-scale expansion of renewable energy. Decarbonising the electricity sector is critical for enabling low-carbon electrification of passenger cars and freight transport, along with residential housing.

But its planned development of large-scale gas extraction and export infrastructure could cause a lock-in in high-emissive energy supply. Heavy reliance and infrastructure investments in natural gas may also hamper decarbonisation efforts in demand sectors such as transport and buildings.

Indonesia

We found that Indonesia could lower its emissions by 20% by 2030 compared to 2010 levels by scaling up climate action in the electricity supply, passenger ground transport and forestry sectors, which together covered about 70% of its emissions in 2014.

This stands in stark contrast to the currently projected 58-68% emissions increase under Indonesia's Paris Agreement target. It would initiate Indonesia's transition towards zero emissions in line with the Paris Agreement and peak Indonesian GHG emissions excluding deforestation and land use shortly after 2030.

The most promising way to full decarbonisation is for Indonesia to prioritise developing renewables to make up a share of around 50% by 2030 and 100% by 2050. This would deliver the greatest societal benefits and avoid large-scale early retirement of new coal-fired power plants. To come into line with the Paris Agreement, Indonesia needs renewables to take up a 50–54% share of the electricity sector by 2030, with no new coal plants and coal phased out by 2040.

Decarbonising the energy sector

ABOVE: Heavy smog casts a veil over New Delhi, India. Photo by Ben Dalton/Flickr (CC2.0)

BELOW: Projected emissions from coal-fired power plants in Association for South East Asian Nations (ASEAN) and South Asian countries.

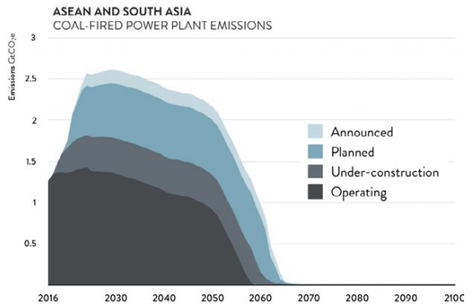
All countries need to have almost completely decarbonised their energy systems by 2050 to meet the Paris Agreement's 1.5°C target and avoid the worst impacts of climate change. Achieving the Paris goals also means phasing out coal entirely from the electricity sector by 2030 for OECD countries and by 2040 for the rest of world. Bold action is needed but our research shows that public and private investors are still planning new coal capacity, including in emerging economies, where pollution released from burning the fuel poses a huge risk to human health.

Decarbonising South and South East Asia

South and South East Asian countries face the difficult task of balancing rising energy demand and tackling energy poverty with decarbonising their energy systems. This report, published ahead of the UNFCCC climate meeting in Bonn in June, shows that renewables are the best way forward for countries in the region, allowing them to meet citizens' needs, decarbonise their economies, reduce air pollution and develop sustainably.

The report profiles seven countries (India, Pakistan, Bangladesh, Thailand, Vietnam, Indonesia and the Philippines), assessing their energy sectors, needs and potential for renewables development. South and South East Asia contain some of the regions most at risk from climate impacts but they also hold great potential to develop renewable energy, including solar, wind and wave. The report shows that this transition would come with multiple benefits, from increased energy security to reduced air pollution, a grave concern in many of the countries profiled.

These regions contain a large proportion of the world's population, and this is set to grow, so their contribution to meeting the Paris Agreement's goal of keeping warming within 1.5°C above pre-industrial levels cannot be underestimated. A transition to clean energy systems would also allow these countries to do their part to keep warming within the 1.5°C limit, for the good of people both home and abroad.



Coal mine shaft in Herten, North Rhein-Westphalia, Germany. Photo by Daniel Mennerich/Flickr (CC 2.0)

Global fossil fuel production out of step with climate goals

There is a concerning gap between the amount of fossil fuels that countries are producing and the level consistent with achieving the Paris Agreement goals. In 2019, Climate Analytics took part in drafting the Production Gap Report, the first report studying this growing gap globally.

The report found that governments are planning to produce 50% more fossil fuels than would be consistent with a pathway leading to +2°C of warming above pre-industrial levels and 120% more than the 1.5°C goal outlined in the Paris Agreement.

The expansion of fossil fuel production is underpinned by national plans, subsidies and other forms of public finance, highlighting the need for extensive policy changes if the world is to achieve the Paris Agreement.

The report complements the UN Environment Programme's Emissions Gap Report, which outlines the distance between countries' emissions and the level consistent with meeting the Paris Agreement. The study found that the planned level of fossil fuel production is also beyond the level consistent with countries' national climate plans (nationally determined contributions, or NDCs), meaning the fossil fuel production gap is even larger than the already significant emissions gap.

In drafting the report, Climate Analytics collaborated with leading research organisations, including Stockholm Environment Institute (SEI), International Institute for Sustainable Development, Overseas Development Institute, CICERO Centre for International Climate and Environmental Research and UNEP.

REPORT: Production Gap Report, November 2019

Phasing out coal 'most important step' for Paris goals

Phasing out coal from electricity is the single most important step we can take keep warming within the Paris Agreement's 1.5°C temperature limit, according to a report by Climate Analytics, released for the UN Secretary General's Climate Action Summit in September.

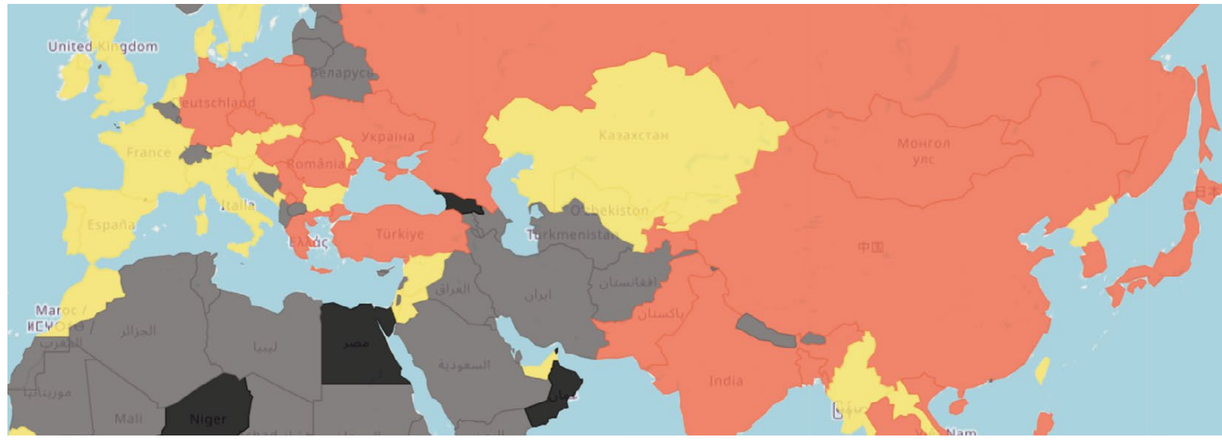
The report assessed the speed at which coal needs to be phased out to meet the Paris Agreement, in light of the latest science from the Intergovernmental Panel on Climate Change (IPCC). It found that although the coal pipeline has shrunk by 75% since the adoption of the Agreement, cancelling new coal is nowhere near enough to meet its 1.5°C limit.

The report found that unabated coal-fired power generation should be reduced globally to 80% below 2010 levels by 2030 and phased out before 2040, some 10 years earlier than previous estimates. To achieve this, many operating coal plants will have to go offline before the end of their technical lifetime and their use significantly reduced in the meantime. Governments should also refrain from building new coal plants.

The report also stresses that to help achieve this governments should substantially improve their nationally determined contributions, the climate plans which they pledged to make upon signing the Paris Agreement. Their new climate plans should include clear commitments to phase out coal, remove subsidies for fossil fuels, and build support for renewables and energy efficiency, it says.

The report executive summary is also available in a number of different languages, enhancing its reach and accessibility.

REPORT: Global and regional coal phase-out requirements of the Paris Agreement: Insights from the IPCC Special Report on 1.5°C, September 2019



The online tool "The Lowdown on Coal" features a hotspot map, which shows countries with significant coal expansion plans

Staying within 1.5°C requires transformational change

Governments' current climate plans set the world on course for approximately 3°C of warming (according to the Climate Action Tracker). Ahead of the UN climate summit in Madrid in December, Climate Analytics published a report setting out how much improvement in global climate action is required to close the gap with the 1.5°C target laid out in the Paris Agreement.

All governments are required to publish a new set of climate plans, or nationally determined contributions (NDCs), in 2020, as part of their Paris Agreement commitments. If governments only increase their climate action incrementally, this will put achieving the Paris Agreement targets out of reach.

The report makes clear that governments will have to increase their climate action substantially, both for the period until 2030 and between 2030 and 2050, if they are to meet the Paris Agreement targets. By 2050, countries' emissions will have to be 50% lower than the 2030 level implied by their current climate plans.

A 35% reduction would bring substantial progress in closing this emissions gap but would still be insufficient for meeting the 1.5°C target. The report further explains that all countries will have to do their part to make the target achievable.

REPORT: How can Paris Agreement commitments be improved now to close the gap to 1.5°C, December 2019

Mapping coal addiction around the world

Phasing out the use of coal, one of the most polluting fossil fuels, for energy is vital if we are to meet the 1.5°C target. The Lowdown on Coal is an online tool that provides an overview of a country's current coal capacity and shows how much it is expanding by including data on planned or announced coal developments. This provides fossil fuel scientists and campaigners with vital information and shareable graphics on the state of play of coal in a given country, as well as a snapshot of where the new coal development hot spots are around the world.

CLIMATE TOOL: The Lowdown on Coal (tools.climateanalytics.org/the-lowdown-v2.0/)

Our climate scientist Dr Fahad Saeed and policy analyst Paola Yanguas Parra speak at a press conference on the Decarbonising South and South East Asia at the UN climate meeting in Bonn in June.

Spotlight on Australia

Towards the end of 2019, as vast swathes of Australia were being ravaged by devastating bushfires of unprecedented scale and intensity, the disconnect between its vulnerability to climate change – such as droughts and earlier and longer bushfire seasons – and the inadequacy of its domestic response to tackling it as well as its obstructive international stance have increasingly come under scrutiny.

The 2019 bushfires in Australia had a devastating impact on people's livelihoods and local biodiversity as well as releaseing millions of tonnes of carbon dioxide into the atmosphere. Photo by Sippakorn Yamkasikorn

We published an impactful report in December during the UN climate summit in Madrid, which revealed how the Australian government was looking for ways to weaken the Paris Agreement by wanting to use 40-year-old Kyoto protocol credits to meet its 2030 climate targets. The report "Australia's proposed 'Kyoto carryover' - nature, scale, implications, legal issues and environmental integrity of the Paris Agreement", produced for the Australia Institute, showed that it would not be legitimate or defensible — from a factual, legal or equity perspective — for Australia to count its Kyoto Protocol "overachievement" toward its Paris Agreement climate commitment (NDC).

According to our calculations, which were also released during the Madrid summit, allowing other countries to use these Kyoto carryover units to meet their Paris Agreement commitments, as Australia proposes, would lead to delays in energy and economic system transformations, and in turn result in an additional 0.1°C of warming.

In fact, due to the lack of serious attempts to ramp up climate action combined with reliance on "carrying over" surplus Kyoto, Australia's rising emissions are set to far outpace its insufficient 2030 climate target, as assessed by the Climate Action Tracker at the end of 2019.

According to the 2019 Brown to Green Report, the most comprehensive review of how G20 nations are doing on climate action, Australia is one of the worst performers. Climate Analytics is the Australian partner involved in the report.

Australia is far behind similar economies in terms of pollution per person and emissions intensity, as we showed in a series of factsheets produced in collaboration with the Australian Conservation Foundation. Two of these, on transport and electricity, were released in early 2019. They showed that Australia's combined vehicle fleet of 19.2 million vehicles is one of the world's most polluting and least efficient. Despite its huge potential for renewable energy, it also has one of the most polluting power grids in the world with 62% of electricity generation coming from coal.

In addition to its inadequate emission reduction efforts, the Climate Action Tracker has also looked into Australia's climate governance, and rated it 'poor.' The grounds for this scathing assessment include the government's efforts to undermine adequate climate mitigation, its support for the fossil fuel industry while ignoring climate research and the advice of national and international experts.

So what can Australia do domestically to step up its emissions reductions? Significant action is needed in all sectors but our report "For climate's sake: coal-free by 2030. Rationale and timing of coal phase-out in Australia under the Paris Agreement," released in November 2019, showed that ending its dependence on coal for electricity generation by 2030 is the single most important element of Australia's contribution to global efforts to limit warming to 1.5°C and prevent the worst of climate change. The report was prepared to serve as the basis for the launch of the Australia Beyond Coal campaign.

Australian states have a key role to play in climate action, while reaping the great benefits this generates. Working with the Australian Marine Conservation Society, our report "A 1.5°C Compatible Carbon Budget for Queensland, Australia" showed that Queensland should reduce emissions from its energy and industry sectors by 58% by 2030, as well as exit coal to be in line with the Paris Agreement. One of the key interests at stake is protecting the Great Barrier Reef, which has already suffered enormous damage as a consequence of climate change.

Another example is Western Australia, which is likely to use up its Paris Agreement 1.5°C compatible carbon budget within just 12 years unless it acts to reduce its emissions, as we showed in our report "A 1.5°C compatible carbon budget for Western Australia" published in November 2019. The report also highlights that the state is well placed for an energy transition, with various minerals needed for renewable technologies and proximity to potential markets for green hydrogen.

TOP: Many firefighters and volunteers, including from abroad, took part in the effort to control the 2019 bushfires. Photo by BLMIdaho (CC2.0)

BOTTOM: Great Barrier Reef, which has already suffered enormous damage as a consequence of climate change. Photo by Edward Haylan/Shutterstock.

What Australia does on the international scale has significant implications for the global efforts to keep climate change in check. Australia is the world's top exporter of thermal and metallurgical coal, accounting for about 29% of global coal trade in 2016, and world's largest natural gas (LNG) exporter, and is planning to significantly expand fossil fuel production. Our analysis "Evaluating the significance of Australia's global fossil fuel carbon footprint," released in July 2019 showed that these plans threaten global climate goals. If these plans go ahead, by 2030, Australia would be responsible for about 13% of the greenhouse gases that can be emitted if the world is to reach Paris Agreement goals.

Focus on the European Union

Our institute has long established itself as a strong scientific partner for EU research collaboration projects, science-based policy analysis and emissions reduction scenarios for the EU. In 2019, we continued to work on major Horizon 2020 projects and contributed to innovative reports on the EU's energy and transport sectors, providing highly relevant input into the European climate and energy policy debate. We also entered new Horizon 2020 collaborations to contribute our expertise on assessing the risks and costs of climate change.

ABOVE: A tram follows its route alongside the Danube River in Budapest, Hungary. Photo by Chris Caines.

BELOW: Climate Analytics' Dr Andrzej Ancygier (right) and Dr Matthew Gidden speak at a EUKI CEE Climate Policy Frontier event in Berlin. Photo by Rongxi Guo/ Climate Analytics.

Central and Eastern Europe climate policy frontiers

The CEE Climate Policy Frontier project, funded by the European Climate Initiative (EUKI), aims to facilitate knowledge exchange and the promotion of best practices for Paris Agreement-compatible climate action in the transport and building sectors in Central and Eastern Europe, focusing on Bulgaria, the Czech Republic, Germany, Hungary, Poland, Romania and Slovakia. Additionally, the project facilitates knowledge exchange between these countries and other European states.

In 2019, the project partners organised workshops aimed at highlighting and discussing best practices for climate friendly policies in the buildings and transport sectors in Central and Eastern Europe. The workshops, involving a number of regional stakeholders in these sectors, took place in Warsaw and Bucharest.

Climate Analytics also co-organised a seminar in Berlin on emissions reductions in these sectors in Poland, Czechia, Slovakia, Hungary, Bulgaria and Romania, as well as policies compatible with the Paris Agreement's long-term temperature goal of 1.5°C.

The project partners published a brochure highlighting some of the best examples of climate friendly transport and buildings policies at the national level, illustrated by local case studies. The assessment shows that there are numerous opportunities for the CEE countries to learn from each other in both the transport and buildings sectors, whether through overarching approaches enabling broader shifts (such as public transport support in the Czech Republic or Slovak retrofit programmes) or through solutions which either efficiently allocate public funds where they are most needed or distribute them rapidly on a large scale (e.g. Czech and Polish clean heat support programmes).

Co-designing the assessment of climate change costs

The EU is far from immune to the effects of climate change. The COACCH project seeks to contribute to the knowledge base on the complex web of impacts from climate change, assessing their market, non-market, macroeconomic and social consequences in the EU.

Now at its midway point, the project has produced numerous reports and impact analyses, including The Economic Cost of Climate Change in Europe: Synthesis Report on COACCH Interim Results, published in 2019. These show that even the EU's wealthier countries are likely to feel the effects of climate change at various levels.

Climate Analytics led the analysis on the impacts of climate change on industry, energy, services, and trade in the EU, which it presented at the COACCH 2nd Interactive Co-design Workshop in Brussels in October. The analysis showed that the economic structures present in the EU's subnational regions play a significant role in determining how they experience climate change, with differences in impact even within the same country. The report showed that a higher level of warming (the RCP8.5 pathway) will result in a substantially greater decline in industrial and construction labour productivity by 2070 than a more stable warming pathway (RCP4.5).

The COACCH project runs until 2021, with reports to come on biophysical and socio-economic tipping points as well as mitigation and adaptation options in different sectors for Europe.

Pathways and policies for low emissions European societies

The Horizon 2020 project COP21 RIPPLES, which brought together interdisciplinary expertise from 18 institutions to analyse what implementation of the Paris Agreement means in terms of low emission pathways and policies for the European Union, concluded in 2019 with a series of reports and policy recommendations.

Our climate diplomacy and policy experts contributed a report and policy brief on the need to transform the entire financial system in the context of the Paris Agreement's goal under its Article 2.1(c) of making financial flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development. The work found that finance cannot limit itself to growing "green" niches and must simultaneously stop financing and investing in the carbon-intensive assets that are not compatible with Paris Agreement pathways.

The policy brief recommended that policymakers challenge current approaches to accelerate the pace and ambition of financial sector transformation. It concluded that finance must be reconciled with the long term, and financial regulators must have a clear mandate to do 'whatever it takes' to save the climate, in articulation with governmental policies.

Improving governance of climate, water, energy and food nexus

The project "Moving Towards Adaptive Governance in Complexity: Informing Nexus Security" (MAGIC) is a four-year multidisciplinary Horizon2020 collaboration between ten universities and research institutes. It seeks to develop a methodological framework to improve the governance of the complex nexus between climate, water, energy and food.

In its fourth year, the team analysed EU proposals for carbon dioxide removal against the European and global energy and land use assumptions informing different Integrated Assessment Models (IAMs). MAGIC uses a framework covering the socio-economic and the normative ramifications of carbon dioxide removal which asks three key questions: feasibility – is the socio-economic system compatible with the biosphere; viability - is there a balance between supply and demand in the socio-economic system; and desirability – does the society at large accept the outcomes.

We continued to advance a crosscutting understanding of how all these different directives and innovations contribute to European climate mitigation strategies and commitments. In collaboration with all consortium partners, the team is assessing the climate change implications of a set of European policies to improve the sustainable management of the water-energy-food-nexus: land sharing and sparing for biodiversity protection, alternative water sources and water saving in irrigation, electric vehicles and biofuels. We also continued to follow the European Commission's Action Plan on Sustainable Finance.

Working with SIDS, LDCs and other vulnerable countries

Fishing boats off the coast of Dakar, Senegal. Photo by Peter A. Harrison/Flickr (CC2.0)

The IMPACT project

Climate change poses an existential threat to Small Island Developing States (SIDS), Least Developed Countries (LDCs) and other vulnerable country groups and undermines sustainable development prospects for all. Much of our work with these vulnerable country groups stems from IMPACT, an interdisciplinary project funded by the German Federal Ministry for Environment, Nature Conservation and Nuclear Safety (BMU) as part of its International Climate Initiative (ICI), which aims to facilitate implementation of the Paris Agreement at the regional and national level in three focus regions – West Africa, the Caribbean and the Pacific.

The IMPACT project, launched in 2016, seeks to strengthen connections between scientific assessments of climate impacts, vulnerability and adaptation to enable access to finance and help to implement projects on the ground. It also aims to increase ownership locally and improve target countries' abilities to fully represent their interests at the international level.

Each region now has a Climate Analytics adaptation expert who works with stakeholders on the ground, and serves as focal point throughout the entire project. These experts are based in the Bahamas (Dr. Adelle Thomas), Samoa (Dr. Patrick Pringle) and Burkina Faso (Dr. Djibril Dayamba).

One of the unique features that allows IMPACT to deliver tailored policy, technical and scientific support in the focus regions is the "country support request mechanism," developed with partner countries during the inception phase of the project.

In 2019, requests included workshops organised for the Burkina Faso and Togo governments, providing expertise to the Belize government on the design of a coastal early warning system and supporting the development of National Adaptation Plans with the governments of Tuvalu, Republic of Marshall Islands, Niue, Republic of Nauru, and Federated States of Micronesia, in addition to other activities.

This project is implemented in collaboration with Charles & Associates Inc, Caribbean Community Climate Change Centre (CCCCC), Secretariat of the Pacific Regional Environment Programme (SPREP) and Potsdam Institute for Climate Impacts Research (PIK)

CLIMATE ANALYTICS · SPREP · Caribbean Community Climate Change Centre · CAA Inc · PIK

The Pacific

The threat of climate change is all too real in the Pacific, with many islands having already experienced the impacts of extreme weather events and sea level rise. In 2019, our work here centred on adaptation planning, strengthening access to climate finance and building the capacity of regional negotiators to amplify the voice of Pacific SIDS in international fora, making the case for stronger action worldwide.

The interlinkages between land, the oceans and climate change highlighted by the IPCC's Special Report on Oceans and the Cryosphere (SROCC) are of particular interest to Pacific island states. As such, we hosted a workshop on the Special Report in which representatives from 13 Pacific SIDS reviewed the Summary for Policy Makers, with their feedback being delivered to the IPCC as part of its report approval process.

Accessing international finance is particularly important for SIDS, giving them resources to take adaptation measures and build resilience to climate shocks. To support these efforts, we joined forces with SPREP to organise a workshop and a 'writeshop' in Samoa, allowing participants to get to grips with writing proposals for support from the Green Climate Fund (GCF) in developing National Adaptation Plans (NAPs). Attendees could receive advice from the IMPACT project team, our regional partner, the Secretariat of the Pacific Regional Environment Programme (SPREP), and GCF representatives.

Supporting the development of science and local scientists in the region also contributes to building resilience against climate change in Pacific SIDS. In this regard, we supported with SPREP the process for opening the Pacific Climate Change Centre in Samoa. The Centre serves as a base for researchers from around the region and is purpose built to host regional trainings and workshops. It will be an important hub for knowledge brokerage work in the Pacific.

Additionally, IMPACT has provided scientific expertise to countries developing their GCF concept notes and readiness proposals, with in-country missions to Niue and Tonga, and remote support to Tuvalu, the Republic of Nauru and the Federated States of Micronesia.

TOP: Vanuatu farmers in action. Photo by Rodney Dekker.

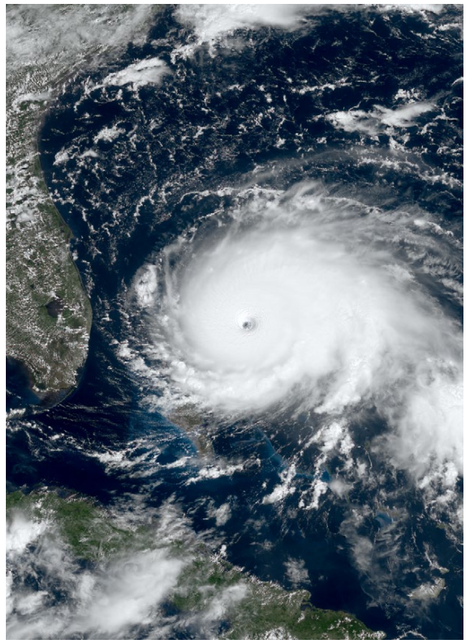
BOX IMAGE: Climate Analytics' Dr Carl Schleussner taking part in a Secretariat of the Pacific Regional Environment Programme event on the role of partnerships in Pacific island resilience. Photo by Climate Analytics.

IMPACT SCIENCE BASED IMPLEMENTATION OF 1.5°C COMPATIBLE CLIMATE ACTION FOR LDC AND SIDS

Partnerships for Pacific Resilience

Climate Analytics took part in a discussion at the UN climate summit in Madrid on the role of innovative partnerships, such as between different meteorological organisations and weather warning systems in bolstering resilience on Pacific island. The Secretariat of the Pacific Regional Environment Programme (SPREP) organised this official side event of the UN climate summit.

Satellite image of Hurricane Dorian over the Carribbean. The hurricane caused widespread devastation, particularly in the Bahamas. It is considered the most intense storm to have hit the island state. Picture by NOAA / Public domain



The Caribbean

Many small island developing states (SIDS), which stand to be some of the hardest hit by climate change, are located in the Caribbean, which is why it is one of the focus areas of IMPACT. In 2019, Hurricane Dorian, the strongest hurricane to have hit the Bahamas to date, brought home this harsh reality. We are already seeing the effects of climate change on small islands at 1°C of warming.

The IPCC's Special Report on Oceans and the Cryosphere (SROCC) brought many of these concerns to light. Together with CCCCC, we jointly hosted a workshop in Belize allowing regional partners to review the SROCC ahead of its publication. The support provided to our Caribbean partners and the participation in the approval plenary resulted in a much stronger Special Report that recognised the challenges faced by SIDS related to changes in the oceans.

We also ensured that SIDS were well represented via our participation in the UNFCCC Techincal Expert Group on Comprehensive Risk Management and the UNFCCC Technology Executive Committee. As a Lead Author of the IPCC's Sixth Assessment Report, our regional scientist, Dr Adelle Thomas, worked closely with the panel to ensure the latest science on SIDS was included.

A critical issue for the region is loss and damage, a part of international climate negotiations which centres on compensation and support for countries facing damage from climate change that exceeds their capacity to adapt, such as destructive sea level rise. In 2019, we assisted with a workshop on loss and damage organised by the Alliance of Small Island States (AOSIS) and contributed to the AOSIS submission to the review of the UN's loss and damage platform, the Warsaw International Mechanism for Loss and Damage (WIM).

We also published a series of scientific articles providing evidence-based information on how policies and activities on adaptation and loss and damage in the region can be improved. These can also be used as support for climate funding proposals.

Belize took over the chairmanship of the Alliance of Small Island Developing States. The launch event, pictured right, took place at the United Nations headquarters in February.

LEFT: Climate Analytics's Least Developed Country support team at the UN climate summit (COP25) in Madrid.

RIGHT: Staff from our Lomé office with stakeholders at a Green Climate Fund Readiness project meeting in Burkina Faso.

West Africa

Many parts of Western and sub-Saharan Africa are highly vulnerable to climate change, whether via rising sea-levels, droughts or extreme weather events. In 2019, the IPCC published its landmark Special Report evaluating the latest science on the links between climate change and land, including land use and cover (SRCCL).

An important part of Climate Analytics' work in West Africa in 2019 centred on exploring the implications of the Special Report for the region. In this vein, our staff joint-organised a workshop to discuss the Special Report with the West African Science Service Center on Climate Change and Adapted Land Use (WASCAL) in collaboration with other important regional organisations active in the climate change response, including the Economic Community of West African States (ECOWAS), the Permanent Interstate Committee for Drought Control in the Sahel (CILSS/AGHRYMET) and the West African Monetary and Economic Union (UEMOA). Climate Analytics also participated in an ECOWAS workshop in Lomé, Togo, initiating the development of a regional climate strategy.

Finance plays a vital role in allowing people in LDCs in West Africa to cope with climate change. In addition to the support provided under the IMPACT project, our Lomé office provided officials and businesses in Burkina Faso with support in accessing the Green Climate Fund (GCF), via our GCF Readiness work, familiarising them with its processes and procedures. The Lomé office also developed a strategy and administrative architecture for climate finance in Burkina Faso, as well as a concept note for GCF funding, with the International Union for Conservation of Nature (IUCN) and the National Biodigester Program, and trained officials in Tunisia's Ministry of Environment on how to use the GCF's climate finance tracking tool.

Planning, financing and execution of projects is vital for climate mitigation but also for adaptation, ensuring locals are as prepared as they can be when there are impacts. In this vein, the Lomé and New York offices pooled their expertise for a project with International Institute for Sustainable Development (IISD) to support Ghana in devising a strategy to engage the private sector in adaptation planning.

The Lomé office also supported the implementation of strong national climate plans (Nationally Determined Contributions, or NDCs) in countries in the region.

Agricultural land in Benin. Photo by Free Photos/Iwaria

Climate Diplomacy

Ministers from Least Developed Countries gathering for a family photo at a meeting in Bhutan to discuss climate action. Photo credit: Climate Analytics

Our Climate Diplomacy team is headed by experienced climate lawyer Damon Jones and is composed of lawyers, policy analysts and scientific advisers, who ensure that climate-vulnerable country representatives have technical support and access to the latest science and policy analysis to help underpin their push for outcomes that protect the interests of their countries in international climate negotiations. With team members in Europe, Small Island Developing States (SIDS) and Least Developed Countries (LDCs), their work in 2019 continued our 10-year track record of supporting vulnerable countries in international climate and related fora.

In 2019, our Climate Diplomacy team further advanced its capacity building role with SIDS and LDCs in response to requests to directly support the Chairs of both groups – Bhutan for the LDC Group and Belize for the Alliance of Small Island States (AOSIS). In responding to the Chairs' and country representative requests and priorities, the team provided a broad range of strategic, real-time, technical, briefing and capacity building support to ministers, negotiators and high-level officials from SIDS and LDCs. This support covered UNFCCC and Paris Agreement rulebook negotiations as well as Intergovernmental Panel on Climate Change (IPCC) and the Green Climate Fund (GCF) processes, and was carried out under the IMPACT project, funded by the German government, and the Climate Ambition Support Alliance (CASA) programme, UK government (Department for Business, Energy and Industrial Strategy (BEIS)).

Small island states

Our support to the AOSIS Chair is led by Rueanna Haynes and highlights in 2019 included contributing to the event to commemorate AOSIS' 30th anniversary and the launch of the Belize chairmanship at UN headquarters, as well as assisting with the organisation of coordinator meetings and preparatory workshops. We supported the AOSIS Chair throughout the year on request, including at the UN Climate Action Summit in New York and the 25th Conference of Parties (COP 25) in Madrid.

In 2019, we also continued providing support to SIDS in climate change negotiations across a number of topics. At the highest level, we supported the AOSIS countries to develop a strategy and narrative around ambition for 2019 as we worked towards the UN climate summit in Madrid, grounded in the latest science from the IPCC Special Report on 1.5°C which was used as a lens for evaluating the group's priorities across the range of themes in the negotiations.

These themes included placing loss and damage as a continued high priority. As part of this, we supported AOSIS in pushing for a successful review of the Warsaw International Mechanism on Loss and Damage. We also provided support in other key areas of thematic work, including the process for the elaboration of supporting tables and formats for the Enhanced Transparency Framework (ETF) and the ongoing negotiations to develop guidance and rules for the market-based approaches and mechanism under Article 6 of the Paris Agreement.

On the ETF, the team supported the AOSIS approach to these discussions which prioritised the principles of transparency, accuracy, consistency, comparability and completeness in the elaboration of the relevant formats. On Article 6, we provided AOSIS with support, advice and technical analysis to assist the group in its push for Article 6 rules that would help to deliver an overall mitigation in global emissions and direct a substantial share of proceeds to support adaptation needs. These negotiations are ongoing.

Supporting regional climate champions

After a successful first phase, the Regional Climate Champions project entered its second phase of work in 2019 under further funding provided by ClimateWorks Foundation (CWF). The project aims to build capacity for climate change advocacy through enhancing awareness and understanding of the Paris Agreement and the international climate change regime throughout the Caribbean, in keeping with the region's call for limiting global warming to 1.5°C.

In 2019, we collaborated with civil society and the private sector in Saint Lucia and Trinidad and Tobago through events dedicated to spreading knowledge and awareness on climate change. The project also promoted intersectional discussion with regional artists involved in sustainability work, including a feature address by the regional climate champion Dr. James Fletcher, alongside acclaimed poet Kendel Hippolyte, at a major regional festival CARIFESTA in Trinidad and Tobago. The project team also provided support to regional organisations such as CARICOM and the Organisation of Eastern Caribbean States (OECS) through briefings on the outcome of COP 25 and progress in ICAO discussions.

Least developed countries

In 2019, our LDC support experts – led by Manjeet Dhakal – provided scientific, technical and real-time support and capacity building to the LDC Group, the Chair and thematic coordinators, both during and between UN climate negotiation sessions. Our team attended negotiation related meetings and also contributed to the preparation of briefings, presentations and various thematic papers. We provided focused support on topics relating to carbon markets, transparency, loss and damage, climate finance, climate science, thus helping to ensure that the LDC Group's priorities and positions were taken into consideration in UN climate negotiations.

Our team participated in planning and carrying out an LDC technical workshop, two strategy meetings and one LDC ministerial meeting. While our role has largely been to provide technical and strategic input during the preparation of various LDC thematic positions and documents, Bhutan, as LDC Chair, valued our on-the-ground presence in ensuring smooth delivery of key LDC decisions. Our team also contributed to the initiative taken by the LDC Group to strengthen its institutional structure and provided advice on how negotiation outcomes can translate into implementation outcomes in-country.

Our LDC experts, in collaboration with our science and policy teams, also assisted in translating the science on the Paris Agreement's 1.5°C goal and related policy research into technical support, aimed at building political momentum to increase climate ambition.

Finance

Developing countries require sustainable, adequate and accessible finance to implement their climate mitigation and adaptation plans. Under the IMPACT project, the climate diplomacy team continued to provide support on finance related matters to LDCs and SIDS via GCF and UNFCCC processes.

2019 was an important year for the GCF as it involved the first formal replenishment process to raise funding contributions. The process concluded in a nominal pledge of USD 9.66 billion from 28 contributors, possibly rising to USD 9.78 billion. Our experts supported LDC and SIDS GCF board and members actively engaged in the replenishment process.

In 2019, the GCF approved a total number of 32 funding proposals, including three from SIDS and 12 from LDCs. Moreover 20 new entities were accredited to access resources from the GCF, of which five were from LDCs (Benin, Cambodia, Nepal, Tanzania and Uganda). Supporting SIDS and LDCs in the application, review and approval processes of the GCF, particularly for countries that have the least capacity, has been one of our priorities in recent years.

Implementing ambitious climate action

Launch of Jamaica's Country Programme for the Green Climate Fund in October 2019. From left: Una May Gordon and Katherine Blackman from the Climate Change Division, Ministry of Economic Growth and Job Creation, Minister Daryl Vaz with members of our Implementation Strategies Team Laetitia De Marez, Paolo Cozzi and Frances Fuller. Photo by Climate Analytics.

Our Implementation Strategies team, led by our New York office with staff at our Lomé branch as well as in the Caribbean and Germany, works closely with developing countries to assist in building lasting capacity and establishing systems and processes for the implementation of adaptation and mitigation actions under the Paris Agreement. Building on our long-standing relationships with Small Island Developing States (SIDS) across the Caribbean, and with developing countries in Africa, in 2019 work in this area mainly focused on projects in Grenada, Saint Lucia, Jamaica, Burkina Faso, Ghana and Tunisia.

Accessing Climate Finance

In 2019, the New York Office provided technical assistance to three Small Island Developing States (SIDS) in the Caribbean region to develop components of their Green Climate Fund (GCF) Readiness Programmes, particularly in the development of Country Programmes for Jamaica and Saint Lucia, as well as preparation of project concept notes.

A parallel aspect of these readiness programmes included building and strengthening the capacity of the National Designated Authorities (NDAs) to the GCF. In Jamaica, Saint Lucia and Grenada, we developed key tools, procedures and strategies tailored to each country, to support the NDA in carrying out their responsibilities and GCF-related activities.

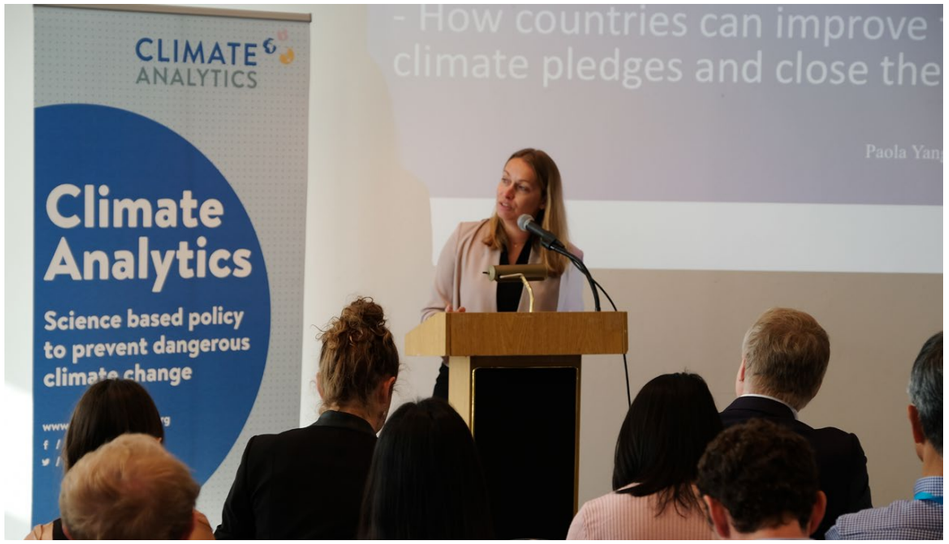
Additionally, the team provided a series of trainings and workshops, and engaged bilaterally with relevant stakeholders in the process.

National Adaptation Planning

During 2019 Climate Analytics branched into working on the involvement of the private sector in NAP implementation. We provided technical assistance to develop Private Sector Engagement Strategies for Ghana and Saint Lucia's NAPs, and a Climate Finance Strategy under Saint Lucia's NAP process.

The strategies were developed in partnership with the NAP Global Network's programme to provide in-country support for NAP implementation. The strategies were developed to support the achievement of the NAP objectives and identify a wide variety of available resources for the financing of adaptation actions. As part of these efforts, we also supported the development two concept notes, including a public private partnership (PPP).

The work in Ghana was undertaken in a collaborative manner between our New York and Togo offices.



Director of our New York Office Laetitia de Marez at an event on improving countries' climate pledges at New York Climate Week. Photo by Climate Analytics.

Working with small island developing states

Climate Analytics New York is strategically situated in New York City, and is in close proximity to United Nations Headquarters. In collaboration with our Diplomacy Team, the Implementation Strategies Team provided support and participated in the kick-off event of Belize's Chairmanship of the Alliance of Small Island States (AOSIS) in February at the UN. The event highlighted the Alliance's 30th anniversary and discussed, "Building Resilience and Expanding Development Horizons through Global Partnerships" to take action on climate change, specifically where sustainable development and oceans intersect.

New York Climate Week

Climate Analytics has been hosting events during New York Climate Week since 2016, and 2019 was no different. In 2019, we hosted two events and panel discussions as part of New York Climate Week, and in parallel with the UN Secretary-General's Climate Summit and 74th General Assembly.

"The race to zero emissions: How countries can improve their climate pledges and close the gap to 1.5°C" - This event presented a number of scenarios for improving the current round of climate pledges (NDCs), show how these improvements could lower the projected global temperature rise, and what global developments can help make this possible.

"From the smallest islands to the highest peaks - oceans, ice and climate change" - Following the release of the IPCC Special Report on 1.5°C, this event outlined the main findings and the implications for vulnerable countries. How to incorporate the report's findings into on-going international climate negotiations was also discussed.

UN Climate Summit - Moments from Madrid

Deputy Director of our New York Office, Frances Fuller opened and moderated Climate Analytics' first event on "Ambition and Action: 1.5° compatible NDCs by 2020", co-hosted by Antigua and Barbuda in the NDC Partnership's Pavilion on December 2nd.

Director of our NY office and Head of Implementation strategies, Laetitia De Marez was on a panel discussion at the NDC Partnership's side event "Next Level NDCs: Raising Ambition with the NDC Partnership's Climate Action Enhancement Package" on December 10th.

Deputy Director of our New York Office Frances Fuller moderates an event on 1.5°C compatible climate pledges at the UN climate summit in Madrid. Photo by Climate Analytics.

Adapting to climate change

ABOVE: Women and children walking in the Sahel region in Burkina Faso. Photo by Daniel Tiveau/ CIFOR (CC2.0).

BELOW: report cover of a guide for practioners for understanding and interpreting the results of climate models in conducting vulnerability studies, produced for the PAS-PNA project.

Science-based climate change adaptation in West Africa

One of the key focuses of our work in West Africa is strengthening connections between science and policy interfaces as well as increasing the capacity and efficiency of science-based National Adaptation Plans (NAPs). This work takes place through the PAS-PNA project (in French *Projet d'Appui Scientifique aux processus de Plans Nationaux d'Adaptation*). The project is active in Benin, Senegal and Burkina Faso, where its main partners are the national ministries in charge of climate change policy, and 12 other Sub-Saharan African Least Developed Countries (LDCs).

The PAS-PNA project came to a close in 2019, culminating in numerous final research outputs supporting the connections between science and policy in Sub-Saharan African LDCs. Local researchers, supported by Climate Analytics, published the first results of their studies assessing climate change vulnerabilities in regions of Benin, Burkina Faso and Senegal, as well as important sectors such as health, agriculture and water resources. We published reports taking stock of the scientific knowledge about climate change in those countries as well as its integration into national policies. We also held a number of workshops in the region.

Climate Analytics organised training sessions and published guides for undertaking and understanding vulnerability studies, contributing to strenghtening connections between science and policy in Sub-Saharan African countries. Three webinars focused on strengthening science-policy interfaces, methods and approaches for conducting vulnerability studies and examples of impact and vulnerability studies. Numerous regional policymakers and researchers attended the sessions.

Our team produced a guide for understanding climate models, strengthening the skills of local scientists and contributing to the accessibility of scientific knowledge on climate change. The guide is available in French and an English version is planned for early 2020.

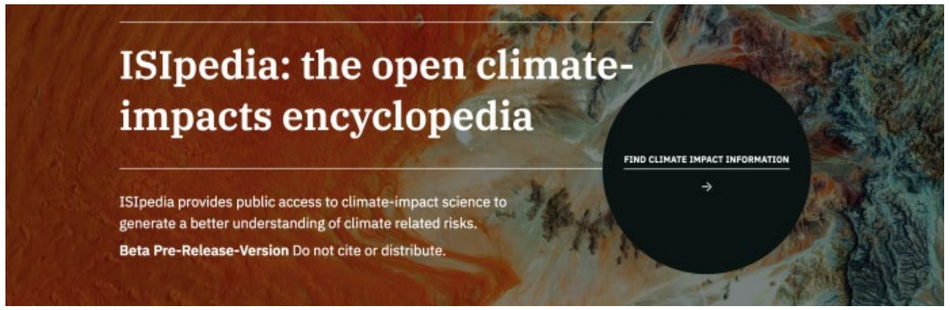
Climate Analytics organised an in-person workshop for the National Civil Aviation and Meteorological Agency (ANACIM) in Dakar, Senegal, a water resources workshop in Ouagadougou, Burkina Faso and another for the Centre de Partenariat et d'expertise pour le Développement Durable (CePED), in Cotonou, Benin.

Climate tools: latest science for adaptation planning

Access to the best available scientific information is of vital importance for governments and communities so they can develop strategies to adapt to a changing climate. As such, we have developed a number of open-access, user-friendly, interactive online tools that make climate projections easily available to policy makers and researchers in fields such as agriculture, energy and human health. Our tools are available at: **climateanalytics.org/tools**

Adaptation Map

Adaptation Map is a tool allowing users to access an overview of adaptation actions, such as new policies, strategies, programmes and projects, that have taken place in their country or the country they are researching.
Available at: **adaptationmap.climateanalytics.org**



ISIpedia - an online encyclopedia of climate impact information

ISIpedia began in 2017 as a project that aims to bridge the knowledge gap between the climate impact modelling community and policy makers by developing an online portal of easily accessible and understandable climate impact information.

One of the goals of the project is to design a portal that provides cross-sectoral, indicator-based climate impact assessments at the global and national scale, based on research carried out under the Inter-sectoral Impact Model Intercomparison Project (ISIMIP). The Stakeholder Engagement team led by Climate Analytics coordinates efforts to attract a diverse group of potential users to shape the design and content of ISIpedia through surveys, workshops and webinars.

In November 2019, the beta-version of ISIpedia was launched for a selected group of users, which was the fruit of successful collaboration between ISIMIP modellers and identified stakeholders. A series of webinars is planned for 2020 aimed at further testing the user friendliness and informativeness of the portal and further collecting feedback from relevant stakeholders. Its interactive design received further recognition at the 2019 Deutscher Designer Club Good Design Competition in November 2019.

In the upcoming months, another round of workshops will be held dedicated to informing users how to effectively use and apply ISIpedia's climate impact information in decision making and research. In parallel, ISIpedia will constantly expand its content and refine its functions according to the feedback it receives.
The ISIpedia portal will be available at www.isipedia.org in 2020.

ABOVE: The ISIpedia data portal, which is the last stages of development.

BELOW: Participants at a workshop to develop indicators for the ISIpedia project in Ouagadougou, Burkina Faso. Photo by Climate Analytics.

Climate Analytics at a glance

An international team

BERLIN NEW YORK LOMÉ AUSTRALIA

101 STAFF
64% FEMALE

72 RESEARCH STAFF
33 NATIONALITIES

Australia, Antigua & Barbuda, Bahamas, Bhutan, Bosnia and Herzegovina, Burkina Faso, China, Ethiopia, France, Finland, Germany, India, Iran, Ireland, Italy, Jordan, Kenya, Luxembourg, Mexico, Nepal, The Netherlands, New Zealand, Pakistan, Philippines, Poland, Saint Lucia, South Africa, Spain, Togo, Trinidad & Tobago, Turkey, United Kingdom, United States of America

Mission

To synthesise and advance scientific knowledge in the area of climate change and on this basis provide support and capacity building to stakeholders. By linking scientific and policy analysis, we provide state-of-the-art solutions to global and national climate change policy challenges.

Vision

To support science-based policy to prevent dangerous climate change, enabling sustainable development

42 Events and workshops

82 Partner organisations

29 Reports & peer-reviewed publications

Social media

9700+ Twitter followers

4500+ Facebook followers

4500+ Linked In followers

The team

MANAGEMENT

Dr Bill Hare is a physicist and climate scientist with 30 years' experience in science, impacts and policy responses to climate change. Bill has contributed actively to the development of the international climate regime since 1989, from the 1992 UN Framework Convention on Climate Change right through to the Paris Agreement in 2015. Dr Michiel Schaeffer is a biophysicist and brings significant scientific skills and experience in the international climate policy world. Bill and Michiel, who co-founded Climate Analytics in 2008, are both authors of IPCC AR4, which was awarded the Nobel Peace Prize. Henrike joined Climate Analytics in 2010 and oversees our day to day operations covering Finance, Project Management, Project Development, Communications, Human Resources, and Administration.


Dr (h.c) Bill Hare
CEO
Senior Scientist
P


Dr Michiel Schaeffer
Lead Science Advisor
G


Henrike Doebert
COO
Chief Operating Officer
B

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henrike.doebert@climateanalytics.org

CLIMATE SCIENCE

Our Science Team conducts cross-cutting research which analyses impacts and risks in order to understand the full implications of climate change, as well as to help develop pathways and scenarios to limit the increase in global temperatures to 1.5°C. The team has contributed to several major reports on the issues of climate change and sustainable development, always aiming to make the latest climate science easily accessible by presenting the highly complex findings in a way that is comprehensible to stakeholders in the international climate arena.

EXPERTISE
- Impacts and risk assessment
- Climate vulnerability
- Climate modeling
- Data analysis (socio-economic, spatial, socio-ecological)
- Capacity building
- Climate science communication
- Food-water-energy nexus
- Economic costs of climate change
- Development economics


Dr Carl-Friedridrich Schleussner
Head of Climate Science and Impacts
B


Dr Tabea Lissner
Head of Vulnerability and Adaptation
B


Rand Abu Ajamia
Research Analyst
B


Marina Andrijevic
Research Analyst
B


Thessa Beck
Research Analyst
B


Dr Djibril Dayamba
Climate Impact & Adaption Expert
G


Chelsea Jones
Research Analyst
B


Dr Katharina Lehmann-Uschner
Climate Change Economist
G


Dr Quentin Lejeune
Research Associate and Knowledge Broker
B


Dr Rosanne Martyr-Koller
Coastal Hazards and Adaptation Scientist
B


Inga Menke
Research Associate and Stakeholder Engagement Expert
B


Shruti Nath
Research Analyst
B

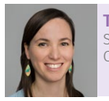

Dr Alexander Nauels
Scientific Advisor
B


Petra Nieland
Project Manager
B


Peter Pfleiderer
Data Analyst and Programmer
B


Charlotte Plinke
Research Analyst
B


Patrick Pringle
Regional Scientist
G


Theresa Rauch
Scientific Project Coordinator
B


Dr Fahad Saeed
Scientific Model and Data Manager / Programmer
B


Jessie Ruth Schleypen
Development Economist
B

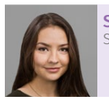

Olivia Serdeczny
Research Analyst Loss and Damage
B


Ella Strachan
Regional Scientist
G


Emily Theokritoff
Research Analyst
B


Dr Adelle Thomas
Senior Caribbean Research Associate
G


Nicole van Maanen
Research Analyst
B


Susanne Baur
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Jean David Coulibaly Quezzin
Student Assistant
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Kaylin Lee
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Tessa Möller
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B BERLIN N NEW YORK L LOMÉ P PERTH G GLOBAL

This complete list of staff is accurate to early 2020.

IMPLEMENTATION STRATEGIES

Our Implementation Strategies Team has a wide range of experience in facilitating turning climate strategies and targets into actions at national and regional levels. It focuses on enhancing developing countries' ownership in implementing climate action with tailored tools and training to build institutional and technical capacity in governments and key stakeholders. The team also supports countries in the process of translating their mitigation pledges and adaptation plans into robust project concepts and investment plans.

EXPERTISE
- National and regional adaptation planning
- Support in formulating, updating, revising NDCs
- National and regional capacity building and climate finance readiness
- Climate financing strategies and access to GCF
- Monitoring and reporting systems
- Mitigation and adaptation
- Development policy and strategies
- Synergies with the SDGs and development co-benefits


Laetitia De Marez
Head of Implementation Strategies / Director CA New York
N


Frances Fuller
Implementation Specialist
Deputy Director CA New York
N


Paolo Cozzi
Implementation Specialist
N


Dr Komna Djabare
Policy Analyst
L


Koffi Afandi Koumassi
Junior implementation Specialist
L


Corinne Kowalski
Project Manager
B


Shweta Movalia
Implementation Specialist
N


Sneha Pandey
Policy Analyst
G


Rachel Pham
Project Manager
N


Eriko Shrestha
Implementation Specialist
N


Dr Jan Sindt
Science-Policy-Interface Coordinator
G


Koussigan Tovivo
Policy Analyst and Adaptation Expert
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Raghuveer Vyas
Research Assistant
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CLIMATE DIPLOMACY

Our Climate Diplomacy Team works with ministers and negotiators from SIDS and LDCs in the UN climate negotiations, related international processes and regional meetings. It has supported these vulnerable country groups to ensure the Paris Agreement reflects their key priorities, including the 1.5°C temperature goal. The team focuses on providing strategic, technical and real-time negotiation support in developing the Paris Agreement rule-set and in a variety of international climate fora, including the GCF and the IPCC.

EXPERTISE
- Negotiation support for SIDS & LDCs
- Architecture of international climate regime
- International climate and environmental law
- Multilateral agreements
- Green Climate Fund
- Evolution of international climate finance landscape
- Climate finance readiness and enhancing access
- IPCC processes
- Carbon markets
- Capacity building and training


Damon Jones
Head of Climate Diplomacy
G


Manjeet Dhakal
Head of LDC Support Team
G


Rueanna Haynes
Senior Legal Adviser / AOSIS Support Team Lead
G


Mahlet Melkie
Climate Policy Analyst
G


Anne-Sophie Mignon
Project Manager Climate Diplomacy Team
B


Rodrigo Narvaez Rojas
Research Analyst
G


Kristin Qui
Climate Policy Advisor - SIDS Support
G


Dorji Tshewang
Policy Analyst LDC Issues
G

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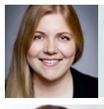
PROJECT DEVELOPMENT AND COMMUNICATIONS

Our Development team works with our scientists and analysts to seek out opportunities to apply our expertise to projects that further our vision to support science-based climate and development policymaking. Our communications staff ensure that our research results and publications reach wide audiences through data visualisation, extensive media networks and outreach activities.

EXPERTISE
- Project development
- Partnership building
- Donor requirements
- Communication strategies & messaging
- Social media and web management
- Media and outreach activities
- Editorial work
- Graphic design, data visualisation of research findings


Lorraine Brindel-Schild
Head of Development and Partnerships
on parental leave
B


Christina Eisenberg
Head of Development and Partnerships
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Ela Smith
Head of Communications
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Marc Hall
Communications Officer
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Sarah Heck
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Benedikta Heldman
Project Manager Project Development
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CLIMATE POLICY

The Policy Team assesses the effectiveness of international strategies and national climate policies, including low-carbon development plans, in meeting global climate goals and reducing GHG emissions whilst achieving sustainable development goals. One important aspect of this work is the Climate Action Tracker (CAT), an independent scientific analysis conducted in cooperation with another research institute. The aim is to increase transparency and to encourage countries to make stronger pledges or increase their level of national action.

EXPERTISE
- Policies and Action
- Integrated Assessment Models
- Emissions gap assessment
- Data analysis and visualisation
- Energy systems and emissions trading
- Sustainable development
- Capacity building
- Programming and modeling


Deborah Ramalope
Team Leader Climate Policy Analysis
B


Dr Matthew Gidden
Team Leader Mitigation Pathway Analysis
B


Dr Tina Aboumahboub
Climate Policy Analyst
B


Dr Andrzej Ancygier
Senior Climate Policy Analyst
B


Marie-Camille Attard
Climate Policy Analyst
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Himalaya Bir Shrestha
Climate Policy Analyst
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Anna Chapman
Climate Policy Analyst
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Dr Kim Coetzee
Project Manager Brown to Green Report
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Paul Donovan
Climate and Energy Policy Analyst
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Dr Ursula Fuentes Hutfilter
Senior Climate Policy Adviser
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Claire Fyson
Climate Policy Analyst
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Gaurav Ganti
Climate Policy Analyst
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Dr Andreas Geiges
Data Scientist
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Rongxi Guo
Junior Project Manager
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Carley Reynolds
Climate and Energy Policy Analyst
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Fabio Sferra
Climate Policy Analyst
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Claire Stockwell
Senior Policy Analyst
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Dr Lara Welder
Energy System Modeller
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Ryan Wilson
Climate and Energy Policy Analyst
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Dr Anne Zimmer
Climate Change Economist
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Dr Robert Brecha
Visiting Scientist
Marie Skłodowska-Curie Fellow (EU Horizon 2020)
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Apolline Foucher
Student Assistant
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Patrick Köster
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Prapti Maharjan
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GLOBAL OPERATIONS

Our Global Operations Team works in three different countries to ensure the smooth management of our various offices and provides support to all other teams at Climate Analytics. The expertise of the team covers management, human resources, finance and logistics.

EXPERTISE
- Working in a multinational legal and financial environment
- Experience in the financial and administrative operations of NGOs and research institutes
- Full project financial and administration support
- Expertise on donor requirements
- National and international tax compliance
- Knowledge of human resources and company law in various countries
- Logistics and event planning


Amandine Berger
Head of Project Management
B


Claudia Neumann
Head of Human Resources
B


Irene Thiede
Head of Global Finance
B


Holali Ametepe
Administrative Assistant
L


Hussein Eid
Finance Officer
B


Amen Eklou
Financial and Project Officer
L


Flavien Kwadjo Ezobafuno Vidja
Project Manager
L


Anne Herzig
Human Resources Assistant
B


Paul Link
Junior Finance Officer
B


Maiju Mikkonen
Office Manager
B


Nikita Patel
Office Manager and Administrator
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René Rott
Junior Finance Officer
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Luka Vasilj
Finance Officer
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Climate Analytics Offices

Oberbaumbrücke in Berlin which connects Kreuzberg and Friedrichshain. Photo by Paco Santana, CC BY NC 2.0

Berlin

The headquarters of our organisation are located in Berlin. Half of our staff works here – in 2019 our Berlin team grew to about 50 employees across all areas. Most of our operations team – administration, finance, project management and development and also the majority of our science and policy staff are based there, and enjoy close working relationships with many European universities, institutes and think tanks on joint projects. A number of our scientists maintain an affiliation with one of the world's leading climate science institutes, Potsdam Institute for Climate Impact Research (PIK), which enables close scientific collaboration.

Berlin is home to many institutes and civil organisations working on climate, energy and sustainable development, both on the EU and international level. Our public events contribute to discussions on such diverse topics as intergenerational aspects of climate inaction, coal phase-out in the EU, priorities of climate-vulnerable countries in the international negotiations and science around the 1.5°C limit in the Paris Agreement.

Members of the New York Office attend a retreat in Vermont, USA. Photo by Climate Analytics.

New York

Our New York office, Climate Analytics Inc. works closely with a number of our stakeholders' permanent missions to the United Nations, at the epicenter of world diplomacy. It provides scientific, policy and technical support to those vulnerable countries in climate and sustainable development related UN processes.

Our New York office also focuses on establishing country systems and processes for the implementation of adaptation and mitigation actions under the Paris Agreement. In 2019, it carried out several projects aimed at strengthening institutional capacity in countries, developing strategic frameworks that enhance ownership and formulating robust project concepts to access climate finance and mobilise private sector investment. Our New York team operates mostly in the Caribbean region (Grenada, Saint Lucia, Jamaica) but also in Ghana, working closely with local experts.

In addition to analytical work, our New York office brings together key audiences to discuss latest science and international climate policy developments, and break the silos between diverse research communities, civil society, financial institutions, diplomats and decision makers to maximise synergies and impact across the different agendas. Our New York team regularly holds or co-hosts high-level events, including during the prominent Climate Week NYC, organised by The Climate Group during the high-level segment of UN General Assembly every September.

Perth

Our office in Perth, Australia was established in 2017 in order to expand our institute's work on climate policy and energy transformation strategies in the Asia-Pacific Region. In 2019, our staff in this region grew to seven, strengthening our policy analysis capacity. Our Australian office has developed links with universities, including Murdoch University in Perth, and our experts are frequently invited to give talks on climate and energy topics.

As a number of rapidly developing economies in the region are planning major new coal power developments, we look into how renewable energy alternatives could meet energy demand, and the benefits this would yield for sustainable development, which is a crucial concern for these countries.

Dr Ursula Fuentes Hutfilter, Senior Climate Policy Adviser based at our Australia office, presenting at conference "Critical Materials: Securing Indo-Pacific Technology Futures" on 8 October 2019 in Perth. Photo by Perth USAsia Centre.

We work with Australian environmental advocacy organisations to produce impactful studies, which feed into to the discussions on Australia's national and state climate and energy policy such as coal phase-out, Paris Agreement compatible carbon budgets or plans for expanding fossil fuel projects. All the reports and briefings received wide coverage in Australian news media.

Lomé

The Lomé office focuses on climate science and governance issues relating to Least Developed Countries (LDCs), especially those across Africa. We have six staff in Lomé and two based in Burkina Faso, working across science, policy, implementation strategies, project management and operations.

Our presence in Lomé, Togo, has enabled us to considerably expand our networks in West and sub-Saharan Africa, creating strong ties to key regional institutions, government ministries and agencies as well as civil society actors in this particularly climate vulnerable region. This allows us to tailor projects to meet these countries' specific demands, in consultation with these stakeholders, and ultimately enable climate policy decision making to be based on robust scientific evidence.

Much of the Lomé team's work relates to developing and reinforcing connections between robust climate science and policy making in the region, providing technical support to governments in implementing their climate plans (NDCs), National Adaptation Plans (NAPs) and turning these plans into bankable projects that are eligible for international climate finance.

From left: Flavien Vidja, Kouassigan Tovivo, Amen Eklou, Laetitia De Marez, Holali Amtepe, Corinne Kowalski, Koffi Koumassi, Tabea Lissner, Djibril Dayamba, Jean-David Coulibaly

The Lomé office plays an important role in providing scientific, policy and analytical support to assist francophone LDCs in the UNFCCC, Green Climate Fund and related climate fora and develops French-language briefing materials and workshops.

Our history

Climate Analytics was formed in 2008 in Potsdam to bring cutting edge science and policy analysis to bear on one of the most pressing global problems of our time: human induced climate change. As the urgency of this problem has grown so have we and Climate Analytics now has around 100 staff with a wide-ranging expertise working in four offices and in different locations around the world. We are motivated by the desire to empower those most vulnerable – Small Island Developing States and Least Developed Countries – to use the best science and analysis available in the international climate negotiations, as well as developing policies and institutional capacity to adapt to climate change.

2008 Poznań

Founding
Three concerned scientists - Bill Hare, Dr. Malte Meinshausen and
Dr. Michiel Schaeffer - founded Climate Analytics with the aim of providing scientific and policy analysis to SIDS and LDCs.

PREVENT
First of its kind, this project combined latest climate science and policy support to underpin the push by SIDS and LDCs for ambitious outcomes in the international climate negotiations.

2009 Doha

Climate Action Tracker
The CAT is an independent science-based assessment, which tracks the emissions commitments and actions of 32 countries and aggregates country action to the global level determining likely temperature increase by the end of the century.

2010 Cancún

SURVIVE
This project delivered science and policy support, which helped SIDS and LDCs secure key elements to protect their interests in the Paris Agreement, including the 1.5°C limit.

UNEP Emissions Gap Report 2010
First in a series of reports – co-authored by Climate Analytics' scientists – assessing compatibility of climate action with the 2°C and 1.5°C temperature goals.

2011 Durban

Green Climate Fund (GCF) Support
The Green Climate Fund was set up for financing climate resilient and low emissions development in developing countries. In 2011, Climate Analytics started supporting SIDS and LDC Transitional Committee members and from 2012 supporting GCF board members.

AMPERE
A major European project focused on analysing mitigation pathways and the associated mitigation costs in a series of multi-model comparisons.

2012 Doha

UNEP Emissions Gap Report 2012
A sobering assessment of the gulf between ambition and reality in respect to keeping a global average temperature rise this century under 2 degrees Celsius.

1st World Bank Turn Down the Heat
Why a 4°C warmer world must be avoided
First in the series of influential reports, produced by Potsdam Institute for Climate Impact Research and Climate Analytics.

2013 Warsaw

High Level Support Mechanism (HLSM) for SIDS and LDCs
Provision of tools and materials to meet ministerial needs in climate negotiations, including workshops for high-level officials and negotiators.

UNEP Africa's Adaptation Gap Report
Climate change impacts, adaptation challenges and costs in Africa.

UNEP Emissions Gap Report 2013
The options to narrow and potentially bridge the emissions gap in 2020.

2nd World Bank Turn Town the Heat
Climate extremes, regional impacts and the case for resilience.

KEY:

- Flagship projects / milestones
- Major reports / Climate Analytics-led or involving our experts as lead authors

2014 Lima

Opening of offices in Lomé and New York
Our office in Lomé, Togo focuses on Paris Agreement implementation and issues relating to LDCs. Climate Analytics Inc. in New York focuses on implementation with emphasis on climate finance, and supports our stakeholders on climate and development related issues.

UNEP Adaptation Gap Report 2014
First in a series focusing on finance, techno-logy and knowledge gaps in climate change adaptation.

IPCC AR5 climate change 2014: synthesis
The Synthesis Report provides an integrated view of climate change as the final part of the IPCC's Fifth Assessment Report (AR5).

3rd World Bank Turn Down the Heat
Confronting the new climate normal.

2015 Paris

Paris Agreement
For the first time, world leaders agreed to limit global temperature increase to well below 2°C and further pursue efforts to limit it to 1.5°C, thereby paving the way for a safer and brighter future for everyone, but particularly for those most vulnerable.

UNEP Africa's Adaptation Gap Report
Bridging the gap/mobilising sources.

UNEP Emissions Gap Report 2015
A scientific assessment of the impacts of the submitted Intended Nationally Determined Contributions (INDCs) on anthropogenic emissions of greenhouse gases.

UNEP Adaptation Finance Gap Report 2015
Bringing together key findings on adaptation costs and finance from AGR 2014 and preliminary findings from the 2016 assessment and drawing on insights related to adaptation costs and related finance needs as stated in the INDCs.

2016 Marrakech

IMPACT
A cross-cutting, multi-faceted project that aims to strengthen the connections between the scientific assessments of climate impacts, vulnerability and adaptation to help SIDS and LDCs access finance and implement concrete projects.

PAS-PNA
A project to provide francophone Least Developed Countries in Sub-Saharan Africa with science-based support when formulating their National Adaptation Plans (NAPs).

RIPPLES - analyses the implications of COP21 outcomes for EU climate policy.

MAGIC - looks at how the EU 2020 Strategy can achieve its goal of smart, sustainable and inclusive economic growth, taking into account the nexus between water, food, energy, land use and climate change.

UNEP Emissions Gap Report 2016

The Low Carbon Monitor
A Climate Vulnerable Forum commissioned report assessing the benefits of limiting global warming to 1.5°C.

2017 Bonn

Opening of office in Australia
Our Australian office has been established to expand our work on climate policy in the Asia Pacific region.

ISIPEDIA
A collaborative project to develop an online platform with climate change impacts information relevant for stakeholders in vulnerable countries.

A stress test for coal in Europe under the Paris Agreement
Report elaborating a strategy for phasing out coal in the European Union and providing a science-based shut-down schedule of coal power plants at the individual unit level.

UNEP Emissions Gap Report 2017
Assessing current national mitigation efforts and the ambitions countries have presented in their Nationally Determined Contributions, which form the foundation of the Paris Agreement.

2018 Katowice

CRAIC - Climate Risk Adaptation and Insurance in the Caribbean.

SLICE - Short- and Long-Term Impacts of Climate Extremes.

COACCH - Horizon 2020 project focusing on co-designing the assessment of climate change costs.

UNEP Emissions Gap Report 2018
Assessment of current national mitigation efforts and the ambitions countries have presented in their Nationally Determined Contributions.

IPCC Special Report on 1.5°C
An IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.

2019 Madrid

NDC 1.5°C Pathways
Paris Agreement-compatible NDC pathways for 68 countries, funded by the IKEA foundation.

LAMACLIMA
JPI Climate project focusing on how land can help to meet the mitigation and adaptation objectives of the Paris Agreement and SDGs.

CONSTRAIN
Horizon 2020 climate science project focused on constraining uncertainty of multi-decadal climate projections.

NAVIGATE
Horizon 2020 project focused on improving the next generation of advanced integrated assessment modelling to support climate policy.

GCF Country Programme
GCF-funded project aimed at enhancing the scientific quality of proposals order to improve access to GCF funding.

Who we work with

2019 Partners

We are grateful for all our partners, funders and financial supporters whose continuous trust and support has made it possible for us to pursue our goal of preventing dangerous climate change and enabling sustainable development by combining climate science and policy.

- Agenzia Nazionale Per Le Nuove Tecnologie l'Energia E Lo Sviluppo Economico Sostenibile (ENEA)
- Asociacion BC3 Basque Centre for Climate Change – Klima Aldaketa Ikergai
- Bruegel Aisbl
- Carbon Tracker
- Caribbean Community Climate Change Centre (CCCCC)
- Catalan Institution for Research and Advanced Studies (Institució Catalana de Recerca i Estudis Avançats - Universitat Autònoma de Barcelona)
- Center for Clean Air Policy
- Centre National de la Recherche Scientifique (CNRS)
- Chalmers Tekniska Hoegskola AB
- Charles and Associates Inc.
- CICERO Senter for klimaforskning
- Climate Action Network (CAN) Europe and International
- Climate Strategies
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
- E3-Modelling IKE
- Ecologic Institut
- Economic Community of West African States
- Eidgenoessische Technische Hochschule Zürich
- Europa-Universität Viadrina
- Expert Forum (EFOR)
- Fondazione Centro Euro-Mediterraneo sui Cambiamenti Climatici
- Fondazione Eni Enrico Mattei
- Fraunhofer Institut
- Fundacao Coordenacao De Projetos Pesquisas E Studos Tecnologico
- Fundacja Warszawski Instytut Studiow Ekonomicznych - WISEEUROPA
- Germanwatch
- Global Climate Forum
- Goethe Universität Frankfurt (GU)
- Humboldt Universität Berlin
- Humboldt Viadrina Governance Platform, Berlin, Germany
- ifo Institute for Economic Research
- Imperial College of Science Technology and Medicine
- Independent Diplomat
- INFRAS
- Institut de recherche pour le développement durable et les relations internationales (IDDRI)
- Instituto Technológico de Canarias
- International Institute for Applied Systems Analysis / Internationales Institut fuer Angewandte Systemanalyse
- International Institute for Environment and Development
- INTRAC
- Joint Research Centre- European Commission (JRC)
- Karlsruhe Institute of Technology
- Laboratoire des Sciences du Climat et de l'Environnement
- Legal Response International
- Ludwig-Maximilians-Universität München (LMU)
- Max-Planck-Gesellschaft zur Förderung der Wissenschaften e. V.
- Mercator Research Institute on Global Commons and Climate Change
- Met Office
- Météo-France
- Ministerie van Infrastructuur en Waterstaat
- National Center for Climate Change Strategy and International Cooperation
- NewClimate Institute
- Norges Teknisk-Naturvitenskapelige Universitet
- Öko Institut e.V.
- Overseas Development Institute
- Panos Caribbean
- Paul Watkiss Associates LTD
- Permanent Interstate Committee for drought control in the Sahel
- Politecnico di Milano
- Potsdam Institute for Climate Impact Research / Potsdam Institut für Klimafolgenforschung
- PricewaterhouseCoopers UK
- Regional Centre and West African Economic and Monetary Union
- Ricardo
- SalvaTerra
- Secretariat of the Pacific Regional Environment Programme
- Senckenberg Biodiversity and Climate Research Centre / Senckenberg Biodiversität und Klima Forschungszentrum
- Société de mathématiques appliquées et de sciences humaines
- Sofiiski Universitet Sveti Kliment Ohridski/ Sofia University St. Kliment Ohridski
- Stichting Deltares
- Stichting Vu
- Stockholms Universitet
- Technische Universiteit Delft
- The James Hutton Institute
- The University of Exeter
- Transtec
- Tsinghua University
- Umeå University
- Universidad Pablo de Olavide
- Universidade Federal do Rio de Janeiro
- Università degli Studi di Napoli Federico II
- Universitat Autònoma de Barcelona
- Universität Graz
- Universität Leipzig
- Université de Genève
- Universiteit Twente
- Universitetet i Bergen
- University College London
- University of Cambridge
- University of Cape Town
- University of East Anglia
- University of Leeds
- University of Oxford
- University of West Indies
- Univerzita Karlova
- Utrecht University, The Netherlands
- Vrije Universiteit Brussel
- Wageningen University & Research
- Weizmann Institute of Science
- West African Science Service Centre on Climate Change and Adapted Land Use
- Wuppertal Institute for Climate, Environment and Energy

Financial information

FUNDERS AND FINANCIAL SUPPORTERS

Agora Verkehrswende

Australian Conservation Fund (ACF)

Australian Marine Conservation Society

Bundesministerium für Bildung und Forschung - German Federal Ministry of Education and Research (BMBF)

Bundesministerium für Umwelt, Naturschutz und nukleare Sicherheit - German Federal Ministry of Environment, Nature Conservation and Nuclear Safety (BMU)

International Climate Initiative
European Climate Initiative

Caribbean Community Climate Change Centre (CCCCC)

ClimateWorks Foundaiton (CWF)

Conservation Council of Western Australia

Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ)

European Climate Foundation (ECF)

European Commission

Expertise France

Fern

Global Legal Action Network

Government of Jamaica

Greenpeace

Hausfeld

Humboldt Viadrina Governance Platform gGmbH

IKEA Foundation

INFRAS

International Institute for Sustainable Development

Munich Climate Insurance Initiative

New Venture Fund

Rockefeller Brothers Fund

Stockholm Environment Institute U.S.

UK Government's Department for Business, Energy and Industrial Strategy (BEIS)

Umweltbundesamt (UBA)

Union internationale pour la conservation de la nature

United Nations Environment Programme (UNEP)

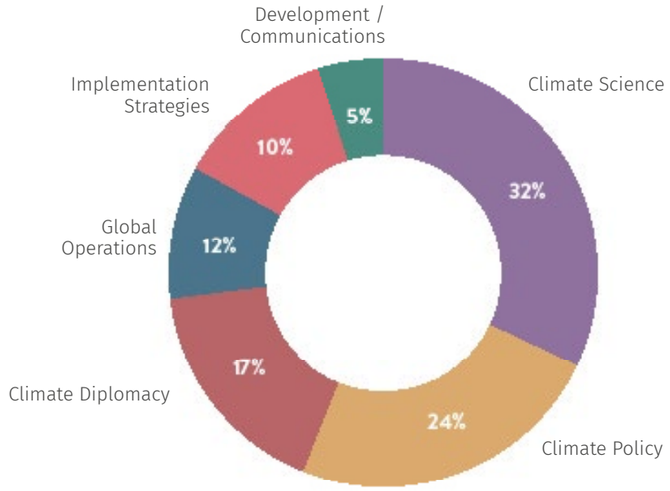
Urgenda Foundation

TOTAL	**€ 5 754 771**

'As a non-profit organisation, we are grateful to all the donors and financial supporters whose continuous trust and support has made it possible for us to pursue our goal of preventing dangerous climate change and enabling sustainable development by combining climate science and climate policy.'

EXPENDITURE

Personnel Costs	4 050 000
Travel and Workshop Costs	873 200
Administrative Costs	460 900
Outreach	13 200
TOTAL	**€ 4 908 000**



These numbers are status April 2020, subject to change and are calculated differently to the annual accounts.

Selected publications

Reports

ENGLISH: En route to Paris? Implications of the Paris Agreement for the German transport sector; GERMAN: Auf dem Weg nach Paris? Implikationen des Paris-Abkommens für den Klimaschutzbeitrag des Verkehrs Ursula Fuentes Hutfilter, Fabio Sferra, Paola Parra, Michiel Schaeffer, Bill Hare (2019)

Australia's proposed 'Kyoto carryover' - nature, scale, implications, legal issues and environmental integrity of the Paris Agreement Climate Analytics Australia (2019)

ZERO IN on the remaining carbon budget and decadal warming rates Alexander Nauels (Climate Analytics), Debbie Rosen (University of Leeds), Thorsten Mauritsen (Stockholm University), Amanda Maycock (University of Leeds), Christine McKenna (University of Leeds), Joeri Rogelj (Imperial College London), Carl-Friedrich Schleussner (Climate Analytics), Ela Smith (Climate Analytics), Chris Smith (University of Leeds), Piers Forster (University of Leeds) (2019)

How can Paris Agreement commitments be improved now to close the gap to 1.5°C Andreas Geiges, Paola Yanguas Parra, Claire Fyson, Annika Günther, Bill Hare, Michiel Schaeffer, Ursula Fuentes Hutfilter (2019)

A 1.5°C compatible carbon budget for Western Australia Ursula Fuentes Hutfilter, Bill Hare, Anna Chapman, Ryan Wilson, Tina Aboumahboub, Himalaya Shrestha, Robert Brecha, Michiel Schaefer. Graphic design: Matt Beer (2019)

For climate's sake: coal-free by 2030 - Rationale and timing of coal phase-out in Australia under the Paris Agreement Paola Yanguas Parra, Ursula Fuentes Hutfilter, Tina Aboumahboub, Fabio Sferra, Michiel Schaeffer, Bill Hare, Alexander Nauels, Gaurav Ganti (2019)

Global climate change impacts on children Inga Menke, Carl-Friedrich Schleussner (2019)

Production Gap 2019 Report SEI, IISD, ODI, Climate Analytics, CICERO, and UNEP (2019)

G20 Brown to Green Report 2019 Climate Transparency Initiative (2019)

A 1.5°C Compatible Carbon Budget for Queensland, Australia Bill Hare, Ursula Fuentes, Fabio Sferra, Michiel Schaefer, Carl Schleussner, Anna Chapman (2019)

Global and regional coal phase-out requirements of the Paris Agreement: Insights from the IPCC Special Report on 1.5°C Paola A. Yanguas Parra, Gaurav Ganti, Robert Brecha, Bill Hare, Michiel Schaeffer, Ursula Fuentes (2019)

Evaluating the significance of Australia's global fossil fuel carbon footprint Paola Yanguas Parra, Bill Hare, Ursula Fuentes Hutfilter, Niklas Roming (2019)

Decarbonising South and South East Asia Ursula Fuentes Hutfilter, Paola Yanguas Parra, Anne Zimmer, Andrzej Ancygier, Fahad Saeed, Robert Brecha, Bill Hare, Jessie Granadillos, Tina Aboumahboub, Gaurav Ganti, Ilsa Kelischek, Raghuveer Vyas, Carl-Friedrich Schleussner, Michiel Schaeffer (2019)

Australia's power supply: brown and polluting Climate Analytics (2019)

Insights from the IPCC Special Report on 1.5°C for preparation of long-term strategies Michiel Schaeffer, Ursula Fuentes Hutfilter, Robert Brecha, Claire Fyson, Bill Hare (2019)

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Governance in socioeconomic pathways and its role for future adaptive capacity Marina Andrijevic, Jesus Crespo Cuaresma, Raya Muttarak, Carl-Friedrich Schleussner. Nature Sustainability 3, 35–41, doi.org/10.1038/s41893-019-0405-0 (2019)

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Boreal summer weather becomes more persistent in a warmer world Peter Pfleiderer, Carl-Friedrich Schleussner, Kai Kornhuber & Dim Coumou, Nature Climate Change 9, 666–671, dx.doi.org/10.1038/s41558-019-0555-0 (2019)

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Different response of surface temperature and air temperature to deforestation in climate models Johannes Winckler, Christian H. Reick, Sebastiaan Luyssaert, Alessandro Cescatti, Paul C. Stoy, Quentin Lejeune, Thomas Raddatz, Andreas Chlond, Marvin Heidkamp, Julia Pongratz, Earth System Dynamics, 10, 473–484, doi.org/10.5194/esd-10-473-2019, (2019)

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Article 6 needs ambition, not time wasting Climate Analytics (2019)

The dangers of blue carbon offsets: from hot air to hot water? Claire Fyson, Carl-Friedrich Schleussner, Bill Hare (2019)

Pre-2020 commitments and the need for more ambitious NDCs Paola Yanguas Parra, Michiel Schaeffer, Andreas Geiges, Claire Stockwell, Alex Nauels, Matt Gidden (2019)

A reminder for the 'Blue COP' - limiting warming to 1.5°C crucial for protecting oceans and ocean services Alexander Nauels, Carl-Friedrich Schleussner (2019)

Greenhouse gas accounting metrics under the Paris Agreement Climate Analytics (2019)

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Towards a solid science base: loss and damage in the IPCC special reports Emily Theokritoff, Claire Fyson, Adelle Thomas, Olivia Serdeczny, Carl-Friedrich Schleussner (2019)

FRENCH: Points clés pour l'Afrique de l'Ouest du rapport spécial du GIEC sur le changement climatique et les terres; ENGLISH: Key points for West Africa from the IPCC Special Report on Climate Change and Land Adama Faye, Quentin Lejeune, Mouhamadou Bamba Sylla, Oblé Neya, Emily Theokritoff, Sarah D'haen (2019)

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A ten point agenda for delivering higher mitigation ambition Frauke Roeser, Niklas Höhne, Lukas Kahlen (NewClimate Institute, Jan Sindt, Bill Hare, Damon Jones (Climate Analytics), Xander van Tilburg, James Rawlins, Jonna Luijten (TNO) (2019)

Australian political party positions and the Paris Agreement: an overview Climate Anayltics (2019)

Australia Climate Factsheets - Vehicle Emissions Ursula Fuentes Hutfilter, Jasmin Cantzler, Fabio Sferra, Bill Hare, Gaurav Ganti, Matt Beer (2019)

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Évaluation des références aux changements climatiques et de leur base scientifique dans les politiques et stratégies au Sénégal Melinda Noblet, Aichetou Seck, Sarah D'Haen, Kouassigan Tovivo (2019)

Commentaries and Blogs

Loss and Damage at COP25 – a hard fought step in the right direction Dawn Pierre-Nathoniel, Linda Siegele, Le-Anne Roper, Inga Menke, 20 December 2019

Home by the sea: new science shows more sea-level rise impacts on small islands Rosanne Martyr-Koller, Adelle Thomas, Alex Nauels, Carl-Friedrich Schleussner, 28 November 2019

The kids aren't alright - climate change impacts on children now and in the future Inga Menke, 20 November 2019

Why climate scenarios need to better incorporate 'adaptive capacity' Carl-Friedrich Schleussner, Marina Andrijevic 28 October 2019

Not even the bare minimum: unpacking Germany's 2030 climate package Robert Brecha, Bill Hare, Carl–Friedrich Schleussner, Andrzej Ancygier, 11 October 2019

Troubled land: a call for sustainable land use and rapid climate action Claire Fyson, Quentin Lejeune, Carl-Friedrich Schleussner, 28 August 2019

How extreme weather conditions could last longer due to climate change Peter Pfleiderer, Kai Kornhuber, Carl Schleussner, 19 August 2019

Carbon tax in schools: a laboratory for change Nicole van Maanen, Carl-Friedrich Schleussner, Andrzej Ancygier, 16 July 2019

Tell me what you need - how to make really useful climate tools Kaylin Lee, Gina Maskell, Inga Menke, Quentin Lejeune, 24 June 2019

The building blocks for vital climate adaptation in small islands Patrick Pringle, Adelle Thomas, 28 May 2019

Centred on science – how the IPCC can guide mitigation action Michiel Schaeffer, Ursula Fuentes Hutfilter, Robert Brecha, Claire Fyson, Bill Hare, 12 April 2019

Where action on climate change, sustainable development and oceans intersects - Belize's vision for AOSIS Amanda Colombo, Rachel Pham, 11 March 2019

Glacial melt spells more trouble in the Himalayan LDCs Fahad Saeed, Carl-Friedrich Schleussner, 25 February 2019

Livin' in the future - delaying climate action and intergenerational justice Carl-Friedrich Schleussner, Marina Andrijevic, Claire Fyson, 07 February 2019

The inadequate in pursuit of the out-of-date: Germany's coal exit must be revised by 2020 Carl-Friedrich Schleussner, 01 February 2019

Climate Action Tracker updates

Scaling up climate action in Turkey New Climate Institute, Climate Analytics, Ecofys (2019)

Climate governance in Australia Climate Analytics and New Climate Institute (2019)

Climate governance in the Philippines Climate Analytics and New Climate Institute (2019)

Pledged action leads to 2.9°C - time to boost national climate action Climate Analytics and New Climate Institute (2019)

Climate crisis demands more government action as emissions rise Climate Analytics, NewClimate Institute, Ecofys (2019)

Transformation points - Achieving the speed and scale required for full decarbonisation Climate Analytics, NewClimate Institute, Ecofys (2019)

CLIMATE ANALYTICS

We are a non-profit institute, which brings together interdisciplinary expertise in the scientific and policy aspects of climate change. We are motivated by the desire to support countries most affected by climate change to use the best science and analysis available in their efforts to secure and implement a global agreement to limit global warming to levels that don't threaten their very survival.

We undertake high quality research on issues most important to the vulnerable countries, including on the 1.5° C temperature limit. Climate Analytics provides a gateway to scientific, policy and legal advice to empower poor countries and enjoys the trust of vulnerable country actors involved in the international climate negotiations and related national processes. We have long-established relationships with key regional institutions in Africa, the Caribbean and the Pacific, serving Small Island Developing States and Least Developed Countries.

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CLIMATE ANALYTICS

Supporting science based policy to prevent dangerous climate change enabling sustainable development

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