

A view of Earth from space, showing the aurora borealis (Northern Lights) in shades of green and blue, and city lights at night. The Earth's horizon is visible, and the background is a dark starry sky.

Reasons to be cheerful: CLIMATE LEADERSHIP IN ACTION

Energy & Climate
INTELLIGENCE UNIT

Why should we act, when (pick a country) isn't?

It is a phrase heard far too often in the corridors of climate delay – most often with China in the ‘pick a country’ space – and it is surely among the most dismal. If we do collectively succeed in keeping global warming to 1.5° Celsius, it surely will not be because every nation takes exactly the same path: there will inevitably be leaders and laggards.

Particularly in the middle of a UN climate summit, we hear a lot about the laggards – the countries that will not commit their fair share on climate finance, those that see forests as things to chew up rather than cherish, and above all the nations that believe the path to riches still lies in untrammelled fossil fuel development. Fine: laggards matter. But in this short report, we want to celebrate the leaders – to tell the stories behind some of the nations that for whatever reason have made firm commitments and stuck to them, in the process building new industries, enjoying jobs-rich growth and a healthier environment, and gaining some measure of international approval.

Though it is not always easy to see, we have made huge strides since the gavel came down on the Paris Agreement back in 2015. The 1.5°C guardrail is now almost universally accepted. [Four fifths of both emissions and GDP are now covered by net-zero targets](#), as is two thirds of the global population. Many components of the clean energy future such as wind and solar power, battery storage and electric cars are being rolled out at an exponentially growing rate. Clean steel and zero-carbon shipping have moved from pipedream to reality.

Cover image credit: NASA

Oct. 30, 2021, an aurora dimly intersected with Earth's airglow as the International Space Station flew into an orbital sunrise 264 miles above the Pacific Ocean before crossing over Canada.

EXECUTIVE SUMMARY

If you look for the reasons why this is happening, almost always there is leadership at the core. A company decides to invest massively in a nascent technology, draws in venture capital, and vision becomes actuality. A country decides to go big on solar power or electric cars, invests, and prices begin to tumble. Or it establishes a pioneering law, or switches public spending from oil to forests, or centres its international reputation on being a good global citizen, or builds climate adaptation into its national development plans. Once there, it serves as an example and sometimes as a model – in the cases of businesses, as a rival too – and the rest of the world begins to benefit.

Here, we draw together examples from around the world of genuine leadership on climate action. These are case studies in which emissions are being cut and removed from the atmosphere, promises are being kept, nature is being restored and protected, technology is being developed and deployed at pace, and resilience is being built – every development helping steer the world towards a safer, more sustainable future.

LEADERSHIP EXAMPLES:



Showing the way: where the UK led with the world's first climate law, putting emissions targets into legislation to bind future governments, others have followed; and where major companies transform their business model to reduce their impact, they set the pace for their competitors.



Building industries & moving markets: when a global market the size of China fuels the electric vehicle industry, that makes it easier and cheaper for others to follow; setting an end date for oil and gas production, as Costa Rica and Denmark have done, starts to drive financing decisions and determine the long-term viability of fossil fuels versus clean, renewable – often now cheaper – technologies.



Supporting people: Helping people and communities transition fairly out of fossil fuel industries and into sustainable, clean future alternatives shows how political leaders and company bosses can take people with them.



Restoring nature: Chile and Costa Rica show the way on expanding natural systems to store carbon and restore space for wildlife, whilst Suriname shows how natural systems can also be allies against the impacts of the climate crisis.



Building resilience: how nations like Bangladesh, vulnerable to devastating climate impacts, have introduced early warning systems fit for the communities and businesses that depend on them, showing others how they can protect lives and livelihoods from the climate crisis.

All of these are happening
now, and many have been
happening for some time.

LEADERSHIP EXAMPLES

Strong evidence of public support

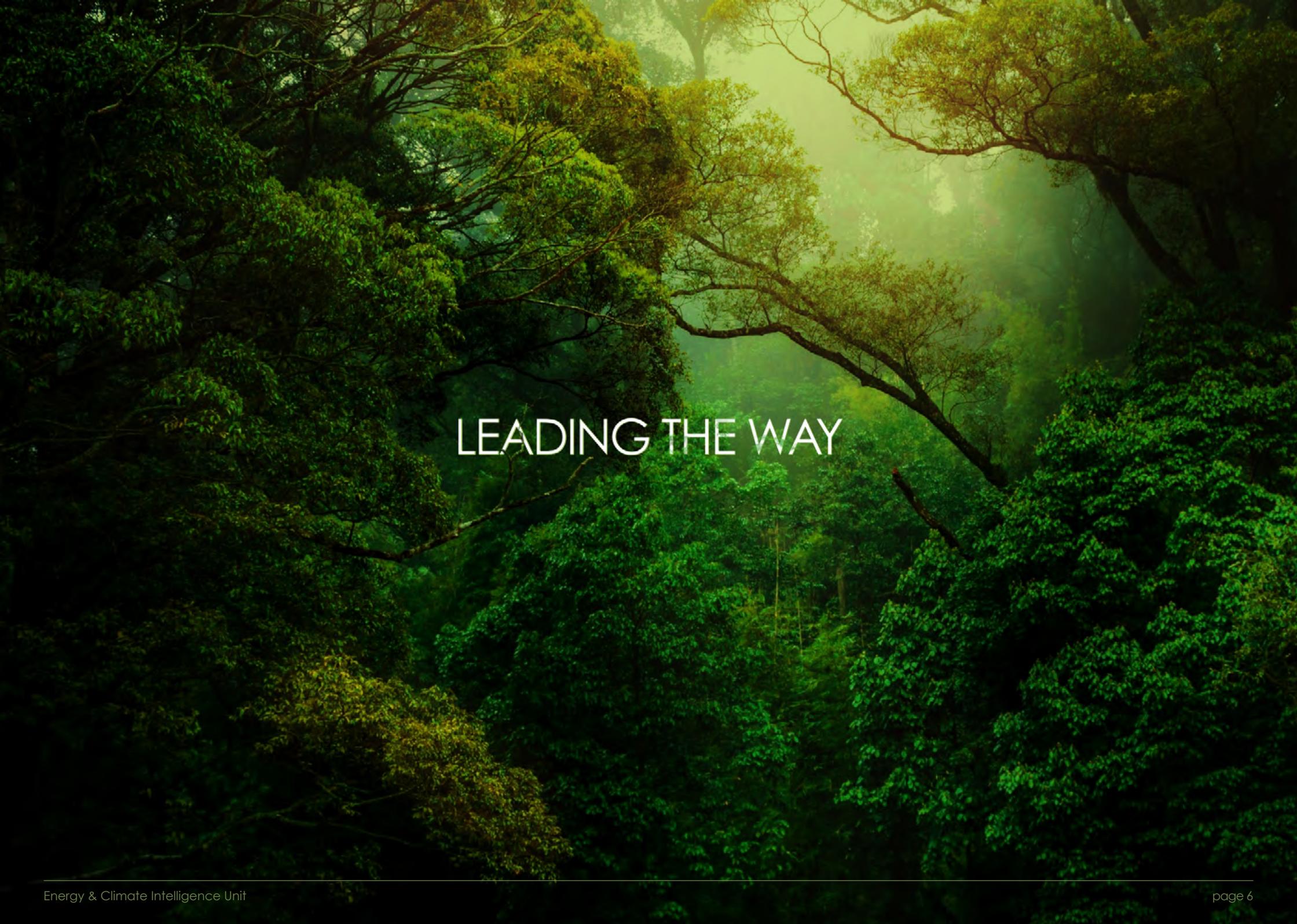
There is huge public support in most countries for action to tackle the climate crisis, and high expectations of leaders – political and corporate – to act on promises made in the Paris Agreement and since. The science is clear that we are running out of time to keep global warming to 1.5°C, and that halving global emissions this decade is critical.

Effective leadership creates innovation cycles

Leaders inspire followers; and when it comes to innovation, those followers become leaders in their own right as they build new solutions. Sharing, building on, learning from and following these examples can be one of the keys to decarbonising our world, and building a safer and more resilient future for people and nature.

Progress will prove COP26 a success

If COP26 turns out to be a summit we can look back on with appreciation – if it makes sufficient progress to keep the Paris Agreement goals within reach – we will for sure be looking back on a summit where leadership won out over dismal delay, and inspired others to begin leading in many and diverse ways.



LEADING THE WAY

LEADING THE WAY: SETTING THE TERMS



UNITED KINGDOM

- » The UK Climate Change Act of 2008 offered a model for other countries when reducing greenhouse gas emissions – setting a target in law
- » The act sets out successive five yearly carbon budgets to ratchet down emissions
- » The government is required to make annual statements to Parliament on progress made under the act
- » It sets up an independent committee of experts to advise government on carbon budgets and climate strategy
- » The UK's decarbonisation has uncoupled the supposed link between increased CO₂ emissions and economic growth
- » The law requires government to reconsider targets if science changes – which led to the UK strengthening its 2050 target from 80% to net zero
- » Other nations have cited the UK law as an example when developing their own

Read more on this: [see full report](#)

1

LEADING THE WAY: DEVELOPING AND DEPLOYING TECHNOLOGY



FINLAND



The market for domestic heat pumps has grown faster in Finland than other countries



Property owners in Finland have taken the opportunity to reduce heating costs and cut their emissions



The Finnish government introduced incentives to encourage take-up of heat pumps



UNITED KINGDOM



Government price guarantees for private investors in offshore wind energy have grown the biggest market in the world for the technology.



It is now driving investment in innovation: deep water, floating wind generators with potentially higher energy yields.



UNITED STATES



On land, onshore wind generation offers a secondary income stream for ranchers in US oil-state, Texas.



CHINA



Mandated manufacturers to produce electric vehicles with the aim of ensuring that by 2030, 40% of cars sold on the domestic market are electric powered.



Chinese citizens now buy more than a million EVs each year, and the total running on Chinese roads is in excess of five million – easily the world's biggest market.

[Read more on this: see full report](#)



LEADING THE WAY: WORKING WITH NATURE



COSTA RICA



First tropical country to halt the destruction of rainforest habitats and successfully restore deforested areas.



An innovative support programme provides payments to landowners adopting sustainable forest management practices.



Private and public areas receive legal protection against unlicensed logging



Sustaining a healthy natural environment has led to a growth in ecotourism



CHILE



Set a target for reforesting 100,000 hectares of land in its previous NDC and is now proposing to ensure that 200,000 hectares of native forest is sustainably managed.



100,000 hectares would be permanent forest cover, including 70,000 hectares reserved for native tree species.



SURINAME



Submitted an updated NDC which is proposing to strengthen coastal protection through nature-based solutions, such as mangrove planting.



The plan highlights the role of indigenous peoples and tribal communities in the sustainable management and maintenance of these forests.



LEADING THE WAY: WORKING WITH NATURE

continued



KENYA

Revised NDC covers both mitigation and adaptation activities, as well as efforts to reduce risks of natural disasters.



UNITED KINGDOM

Government is introducing legally binding targets, through a new Environment Bill, to restore nature and biodiversity and has committed over £750 million to the restoration of trees and peatlands.



Plans to replace direct payments to farmers to support production with a 'public funds for public good' system. In this, landowners will be rewarded for producing healthy food alongside other benefits such as clean water, carbon storage, reduced flood risks, and maintaining wildlife, plant populations and attractive landscapes.

Read more on this: [see full report](#)



LEADING THE WAY: KEEPING PROMISES ON FINANCE

4



GERMANY



One of a few countries to regularly deliver its fair share of international climate finance.



In terms of funding reported to the UN climate convention secretariat, Germany emerges second behind Japan (which has also had a long-term commitment to international climate finance), committing just over \$7bn in 2018, the most recent year for which comprehensive analysis is available.



> In 2018 Germans gave twice as much as Britons, three times as much as Canadians, four times as much as Australians and New Zealanders, and eight times as much as Americans.

[Read more on this: see full report](#)

International climate finance is central to combatting climate change. In the 1992 UN climate convention, richer countries pledged to support poorer ones to reduce greenhouse gas emissions and adapt to the effects of climate change.

Later, in 2009, a number was put on this principle – the richest economies (meaning principally member nations of the OECD) would, by 2020, be providing at least \$100bn per year for the poorest.

LEADING THE WAY: ENDING THE OIL & GAS ERA



Formed Beyond Oil and Gas Alliance (BOGA) to encourage others to stop exploration and extraction of fossil fuels.



Both countries can point to excellent records on environmental issues

Read more on this: [see full report](#)

COSTA RICA AND DENMARK

5

LEADING THE WAY: SHIFTING FROM COAL TO CLEAN



UK AND CANADA

Coal fired electricity generation is the biggest single contributor to global CO₂ emissions. Phasing out coal could prevent 800,000 deaths globally a year from respiratory diseases.

Set up the Powering Past Coal Alliance of nations and companies formed to speed the transition to clean energy, and encourage others to set an end date for coal

- » Canada outlines a 'just transition policy' for 42,000 coal industry employees:
- » emphasis on investigating the concerns of people in affected communities
- » further policies introduced to accelerate the declining demand for coal
- » support for the creation on new, environmentally friendly industries
- » funding provided by federal and provincial government to retrain or relocate former coal workers

[Read more on this: see full report](#)

6

LEADING THE WAY: BUILDING RESILIENCE

Increasing numbers and intensity of extreme weather events are an inevitable consequence of climate change. But one country that is among the most vulnerable in the world to such incidents has shown that it is possible to take action that will greatly reduce harm to lives and livelihoods.



BANGLADESH

- » Faces three separate climate threats that increase the risk of fatal floods
- » Investment in weather forecasting technologies is allowing more time for evacuation from at-risk area
- » There are various methods to warn population of imminent storms
- » Investment in shelters continues
- » Cyclones are still occurring but with far fewer casualties
- » New green economic plan is a catalyst for change, featuring withdrawal from carbon costly fuels and support for renewables
- » Plan expected to create 5 million jobs and generate \$850 million over 10 years

Read more on this: [see full report](#)



LEADING THE WAY: GREENING INDUSTRY

Companies operating in carbon-intensive industries will need to reduce their carbon footprints close to zero within decades. Some are making alliances with other organisations in their sector to develop practical strategies for minimising emissions.



SSAB, SWEDEN: GREEN STEEL



Steel production uses vast quantities of fossil fuels and has been one of the most difficult to decarbonise.



Produced what is said to be the first consignment of 'fossil-free steel' made anywhere in the world, and delivered the product to its customer, the Volvo car manufacturer.



HYBRIT (Hydrogen Breakthrough Ironmaking Technology), is a collaboration between SSAB and two other Swedish companies, the iron-ore mining company LKAB and the power generator Vattenfall.



MAERSK, DENMARK: CLEANING UP SHIPPING



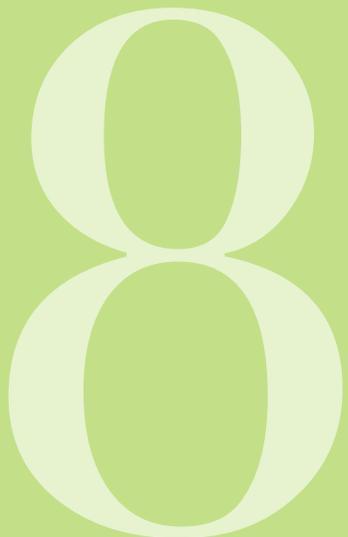
Joined with other freight companies, shipbuilders and maritime industry organisations to establish an independent research and development centre



Investing in low carbon technologies for its own commercial shipping fleet.



Signed a deal with suppliers of methane that will be used in a prototype vessel to verify that the project is viable.



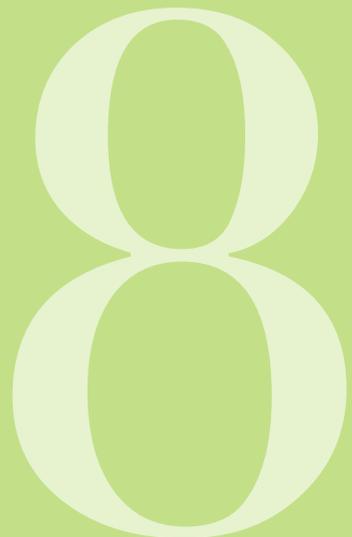
continued



UNILEVER, THE NETHERLANDS & UK: REDUCING BUSINESS IMPACT ON NATURE

- » Announced a US\$1bn Climate & Nature Fund which will be used over a 10-year period to fund projects in landscape restoration, reforestation, carbon sequestration, wildlife protection and water preservation.
- » Scheme will build on some of the initiatives already taken by subsidiaries of the food and household products corporation – such as the:
 - » work of the ice-cream producer Ben & Jerry's to reduce emissions from dairy farms
 - » cleaning products manufacturer Seventh Generation's promotion of clean energy
 - » help offered by the Knorr food products company to encourage suppliers to grow more sustainable food.

Read more on this: [see full report](#)





Energy & Climate
INTELLIGENCE UNIT

Image credit: NASA