As the Green Economy Coalition turns ten, we ask: Is structural economic reform happening fast enough to avoid social and environmental breakdown?

Featuring: ACODE, CANARI, Development Alternatives, Economic Policy and Competitiveness Research Centre, Equality Trust, Finance Watch, Global Sustainability Institute, Libelula, Oxfam, Stockholm Environment Institute, Trade and Industrial Strategies
The Green Economy Coalition (GEC) is the world’s largest movement for green and fair economies. An alliance of civil society organisations, trade unions, businesses and campaigners, the GEC is building a movement for change from the ground up. Our aim is a green economy that benefits people first, especially the poorest, and respects nature’s limits.

Our diverse and growing membership network of more than 50 organisations is tackling some of the biggest challenges of today: extreme poverty, climate change, biodiversity loss, rising inequality, and weak governance. But members are united in recognition that these issues cannot be tackled alone. They are symptoms of an economic system that is ill-equipped to respond to today’s global challenges. Our members are all committed to systemic economic reform.

The coalition is a new type of institution that wires together multiple organisations into shared positions and collective action. Together, we:

- Tell new narratives of change, which resonate with different audiences and challenge current norms.
- Build critical mass in order to confront powerful economic interests and empower local social movements.
- Influence policy by developing the tools and knowledge to hold decision-makers to account wherever they are in the world.
- Forge coalitions between business, civil society and government, united by a shared vision.

Join us at the frontline of the green economic transformation. www.greeneconomycoalition.org

About us

The Green Economy Coalition (GEC) is the world’s largest movement for green and fair economies.
Executive Summary

The 2020 Global Green Economy Barometer takes a broad look at the status of the global shift to green, fair economies. Drawing on insights from our members and their networks, it asks: is a global economic transformation underway?

The transition to greener economies has reached a turning point. Outrage over what we are doing to our planet, amid urgent warnings from scientists, is now hitting home. Schoolchildren in more than 120 countries have walked out of their classrooms to demand that governments take tougher action on climate change. Citizen-led protest movements have not only brought cities to a standstill but are starting to reach the ballot box. In the European elections the Greens challenged mainstream political parties in record numbers. Poll after poll shows that people, particularly young people, want change – they are prepared to vote for it, spend more for it and change their lives for it (see Global Insights).

The science is united. Nature is disappearing at an unprecedented rate while the globe is warming faster. In two major reports, senior global scientists warned of a limited window of 10 years to prevent irreversible damage from climate change, as well as the threat of mass extinctions and severe biodiversity loss. At the same time, the gap between the richest and the poorest is getting bigger and hunger is on the rise for the first time in a decade. As people are feeling left behind, they are increasingly voting for more extreme political parties: the world’s largest democracies, accounting for 28% of the global population, are run by populist leaders.

Our economies are no longer fit for purpose. That message is neither radical nor fringe – it is coming from the heartland of our financial systems – central bankers, insurers and credit rating agencies are ringing the alarm bell in recognition of the systemic risk posed by climate change and biodiversity loss. In the words of Frank Elderson, Executive Director of the Bank of the Netherlands, "A transition to a green and low-carbon economy is not a niche nor is it a 'nice to have' for the happy few. It is crucial for our own survival. There is no alternative".
So, are there glimpses of a deeper economic reform agenda? Are countries ready for transition?

There are some signs of deeper reform:

- **The energy transition is accelerating**: The UK has set a new standard by agreeing to net-zero carbon emissions by 2050. China has already surpassed its 2020 solar panel target and is set to exceed its wind target, putting the country on track to account for over 40% of the total global clean energy mix by 2022. India is expected to more than double renewable capacity by 2020, at a growth rate which is expected to be higher than the European Union. And the EU’s Green Deal, designed to mobilise 1 trillion euros over the next decade, marks the most ambitious net-zero emissions strategy the world has ever seen.

- **Countries are starting to move beyond GDP**: New Zealand, Iceland and Scotland are all leading on wellbeing budgets and alternative measures of progress.

- **There has been a surge in science-based and net-biodiversity gain targets by the business community**: The markets for organic food, meat alternatives and plastic free packaging have taken off.

- **The divestment movement continues to grow at pace**: Institutional investors committed to cutting fossil fuel stocks from their portfolios have risen from 180 in 2014 to more than 1,100. Green and social bonds continue to outstrip all market projections.

- **A set of global institutions equipped to drive a transition to green economies at an intergovernmental level is emerging.**

But the brown economy still reigns:

- **It is still cheaper and easier to buy or invest in harmful products than greener ones.** Investment in oil and fossil fuels is set to increase for the next 6 years at least. Governments spend nearly as much subsidising fossil fuels (US$ 5.2 trillion) as the annual investment needed to deliver the global SDGs (US$ 5-7 trillion).

- **Despite the increase of "natural capital" approaches, mainstream economic analysis which shapes public policy and private investment still fails to account for nature.** This means that our economies are blind to their dependency on nature and the many services it provides.

- **There is no regulatory system guiding the financial markets towards preserving nature and investing in communities.** Financial short-termism is increasing, despite all the evidence that longer term investments return higher value.

- **Rules governing our markets and taxation systems are weighted towards large companies and powerful countries.** 40% of multinationals’ profits are artificially shifted to tax havens.
Efficiency is not enough: Circularity, eco-efficiency and net-zero targets are being adopted, but these efforts alone will not be enough to protect nature. Even with ratcheted up government commitments, countries are not on track to reach the Paris Agreement or the Sustainable Development Goals. To hit mid-century global decarbonisation targets, global energy intensity would need to decline by between 4 and 10% a year. Currently, it is declining at around 0.4% a year.

The next phase of the transition is going to be harder. Vested interests remain powerful. Lobbying groups for the fossil fuel industry, transportation companies, and utilities outspend civil society groups 10 to 1. But the appetite for deep rooted change has never been stronger (see Global Insights).

Global insights: People are calling for green and fair economic transformation

- Only one in five people feel that the current economic system is working for them – and all share an urgent desire for change, revealed a global survey of 33,000 people across 27 countries. (Source: Edelman Trust Barometer 2019)

- In the 2019 European elections, people turned out in force to vote for green parties. Taken together, the green vote accounts for 10% of votes for the European parliament.

- Young people are losing faith in business and urgently want leaders to commit more aggressively to making a positive impact on society and the environment, says a global survey of 10,455 millennials questioned across 36 emerging and developing economies. (Source: Deloitte)

- 66% of people said they would pay more for sustainable goods and services, reveals a global survey of 30,000 consumers in 60 countries around the world. (Source: Nielsen)

- In China, 71% of middle class consumers have increased spending on green products in the last year. (Source: Hong Kong Trade Development Council)
**For government:**

- No corner of our economies will be left untouched by environmental failure. Every national priority – jobs, welfare, poverty, industry, investment – will be hit as nature recedes.
- Market corrections, technology, and efficiency gains alone are not enough. Some governments are starting to undertake deep-rooted industrial and economic policy reform. Failure to take action now will leave countries left behind with stranded assets and redundant industries.
- The green agenda is a social agenda. A new, green and fair economic deal offers an opportunity to re-engage citizens in much-needed public dialogue and start to rebuild trust in government.

**For civil society:**

- The economic rules of the game are still heavily weighted towards the brown economy.
- The next phase of transition will involve more resistance from the institutions and businesses that profit from the status quo. It is essential that civil society organisations work across sectors, geographies and issues to focus on economic reform.
- It is critical that the voices of the poorest, the most marginalised, of women, young people and small or informal enterprises, as well as that of nature, are heard at the policy table.

**For business:**

- The tide has turned. Voters, consumers and citizens are demanding change.
- Doing less harm is not enough. The business models that will flourish will be those that can prove a positive net impact on communities, ecosystems and the global environment.
- Radical transformation and ambition is required, and businesses can be a powerful advocate of a new, green and fair economic order.

"We need a whole new way of thinking. *The political system that you [adults] have created is all about competition. You cheat when you can because all that matters is to win. That must come to an end.*"

– Greta Thunberg, 17-year-old climate change activist, Sweden
# The transition in numbers

## The Green Economy

- Global investment in renewable energy hit **US $272.9 billion** in 2018. (UNEP – Bloomberg)

- Bold climate action could deliver at least **US $26 trillion** in economic benefits and more than **65 million new low-carbon jobs** by 2030 (New Climate Economy)

- The first green bond was issued just over ten years ago. The **total value of the green bond market** has already reached **US $500 billion**. (Climate Bonds Initiative)

- For **four years** running, more renewable energy capacity has been installed than new fossil fuel and nuclear capacity combined (Ren21)

- Achieving the SDGs by 2030 requires **US $5-7 trillion** of annual investment (UNCTAD)

- More than **60% of the world’s population depends on agriculture** for survival. (FAO)

- Restoring 350 million hectares of degraded land could generate **US $9 trillion** in ecosystem services by 2030. (FAO)

- Women are expected to hold **US $72 trillion** of the world’s financial assets by 2020 — double the 2010 level. (The Economist)

- Climate emergency declarations have taken place in **1,039 jurisdictions** and local governments, covering **266 million citizens** (Climate Emergency Declarations)

- A global carbon price would **generate up to US $4 trillion** for public services. (Carbon Pricing Leadership Coalition)

## The Brown Economy

- Unchecked climate change will **wipe out** **US $20 trillion** of assets from the global markets (Bank of England)

- The world’s **26 richest people** own as much as the poorest **50%** (Oxfam)

- Green bonds represent **less than 1%** of the **US $53 trillion** global bond market. (Climate Bonds Initiative)

- Fossil fuels still provide **80% of humanity’s total energy** – roughly the same share as in the 1980s. (BP Statistical Review)

- Last year governments subsidised fossil fuels by **US $5.2 trillion** (International Monetary Fund)

- Over **75% of the Earth’s land area** has been severely degraded, and this figure could increase to **90%** by the middle of the century (Joint Research Centre, European Commission)

- Since 1970, **20% of Amazon rainforest**, **50% of all shallow-water corals**, and **87% of all wetlands** have been lost. (National Academy of Sciences of the United States of America)

- The unpaid care work done by women is estimated at **US $10 trillion** – 43 times the annual turnover of Apple (Oxfam UK)

- The fossil fuel industry, transportation companies, and utilities outspend environmental groups and the renewable energy industry **10 to 1** on climate lobbying (Climatic Change Journal)

- Global pollution **costs the world US $4.6 trillion** every year. (The Lancet Commission On Pollution And Health)
Introduction

When the Green Economy Coalition was founded 10 years ago, we did not anticipate how quickly change could happen. Back in 2010, coal was king and the combustion engine looked likely to rule the road for generations to come; central banks had barely registered climate change, green bonds did not exist and impact investment was still in its infancy; the Sustainable Development Goals were little more than an idea. The prospect of a green economy looked a hopeful but distant vision.

Today, the global green economy landscape looks very different. Global institutions and partnerships have emerged to support governments in their journeys to green their economies. Existing global institutions, economic organisations and multilateral development banks are now devoting resources to green economic development. New champions have emerged, including some unexpected ones, such as central banks, religious leaders, insurance industries, credit rating agencies and accounting firms. The markets have responded in some areas with remarkable speed. Renewables are now cheaper than fossil fuels, and for the first time since the industrial revolution, there are more coal plants being decommissioned than built.

The green economy agenda has matured over the past 10 years. Firstly, international institutions have come to see that green policies are not, by default, fair ones and that policies must be designed with poor and marginalised groups to ensure that they leave no one behind. Secondly, as a result of the natural capital agenda, there has been a subtle but profound shift in the perspective of some governments and businesses who once saw only their impact on nature – now they see their dependence on nature. Finally, a new dawn of different movements championing economic reform has emerged – from circular economy to post growth, and from wellbeing economics to an approach based on capitals. The appetite for a new, greener, fairer economic system has never been higher or more mainstream.

But let us be clear: the scale of the transition ahead is breathtaking. About 80% of our global energy needs are still generated by fossil fuels and investments in them are on the rise again.

Over 70% of our ecosystems are now degraded.

Just 1% of people in the world own more than 50% of the world’s population.

What we mean by green and fair economies: An economic system that supports prosperity for everyone within the ecological limits of the planet. For us it is one in which natural systems – biodiversity, water systems, soils, forests etc – and people can thrive. It is also one that redistributes natural, physical and financial wealth, thereby closing the inequality gap between the rich and poor. As such for us an inclusive green economy is not just one that brings diverse voices into the policy making process, rather it is also one that delivers fairer outcomes.

A transition has begun
Our planet and our way of life is facing a crisis, the likes of which we have never known before.

As nature starts to fail, so too will our economies and our communities. For this transition to reach the necessary scale and speed, we must reform our economies:

- From extraction... ...to restoration
- From concentrated economic power and wealth... ...to distributed economic power and wealth
- From linear economic models... ...to circular economic models
- From short term horizons... ...to long term horizons
- From measuring profit and productivity alone... ...to measuring wellbeing and the state of nature

This report takes a broad look at the global transition to green economies over the last 10 years, drawing on insights from our members and their networks, and their research.

We examine the transition to a green economy through the five dimensions that our Coalition members have defined: Valuing nature; tackling inequality; greening economic sectors; reforming financial markets and governing and measuring.

We outline some of the key trends and roadblocks, and highlight what is giving us reason for both hope and alarm. We also define urgent actions for government and businesses to kick start and accelerate an economic transformation at the scale and speed that is required.
Green economic reform – how and why

Inequality, poverty, climate change and biodiversity loss are not just connected, they arise from the same problem: how our economies are organised, ruled and managed.

Through our analysis, we have identified five system flaws that are driving our economies towards unsustainable forms of consumption, production and behaviour:

1. **Short-termism**: The ever-shortening time horizons in financial and political systems means that instant returns are prioritised and incentivised over longer term returns.

2. **Fallacy of "trickle-down" economics**: Persistent deregulation of the markets has not resulted in "trickle down" wealth. Rather, it has concentrated the world’s wealth into the hands of very few companies, countries and individuals.

3. **Economic blind-spots**: Extreme weather, falling agricultural yields and toxic air are already damaging the global economy. But our economies remain largely ignorant of these risks, because many of our most vital natural assets – like clean water, healthy air, or pollinating insects – have been valued at close to zero in mainstream economic models.

4. **Outdated metrics**: Economic growth is failing to deliver real wage increases, improved wellbeing or future prosperity. Despite the consensus that GDP and financial reporting provide very limited information on how a country or a company is really faring, they still dominate notions of progress.

5. **Incentivising consumption**: Our economies are built on the consumption of more things, using ever more materials. Future economic growth is predicated on this consumerist model, against which our infrastructure and pension debt are leveraged.
We believe that tackling these flaws requires a series of systemic interventions:

Only by Measuring and Governing our economies differently, beyond GDP growth or corporate profit margins, can we re-orientate the economy towards protecting nature and enhancing wellbeing. Our work focuses on governance and tools that can help identify and disperse concentrated economic power, and promote the transition away from consumption economies to knowledge economies based on circular principles.

By Reforming Financial Systems we are looking to break the cycle of short-termism that has captured global finance and governments. We are working to build the institutions that can help finance to be more sustainable, as well as promoting the tools, regulations and metrics that can help finance be a prudent ally in the transition to green economies.

We are Greening Economic Sectors so that they recognise dependencies on nature and can mitigate their impact on our climate and natural environment. The way we produce energy, grow food, process waste and design buildings all require radical changes. These systems are slow to move, and impact our economies for decades. We are promoting plans, policies and investment that can help to ensure we restore nature and decarbonise our industries in time.

The success of the transition depends on Tackling Inequality which has been created by our current economic model. Bearing in mind that growth is neither green nor inclusive by default, we are identifying the win-win solutions that can build the green economy, give people a stake and deliver more inclusive and more democratic outcomes. A just transition is one that works for coal miners and waste pickers, as well as communities directly threatened by environmental crisis.

Ultimately all our solutions are about Valuing Nature better – economically, environmentally and culturally. While governments are driven by economic imperative, the value of nature cannot be set as zero. We explore approaches that better value the essential services nature provides, while uncovering the blind spots in the ways we plan and invest for the future. Natural capital and wealth accounting can help us get there.
Valuing nature

Tackling inequality

Greening economic sectors

Reforming financial markets

Measuring and governing
Measuring and governing

"Moving nations beyond GDP – and corporations beyond profit – to new models of economic governance."

Policy solutions include: Green Economy plans; Green New Deals; shared ownership models; net-zero carbon targets; National Wealth Accounts; gender inclusive governance.

Reforming financial systems

"Greening and decentralising too big to fail financial institutions towards models of ethical and sustainable finance"

Policy solutions include: green finance taskforce; incentivising long-term investment; greening monetary and macroprudential policies; strong carbon prices; green investment banks.

Greening economic sectors

"Setting policy to incentivise transition in our key food, transport, energy and industrial sectors."

Policy solutions include: funding for renewable energy; sectoral transition plans; binding carbon budgets; support for green/social enterprise.

Tackling inequality

"A green transition that puts people – especially the poor, marginalised and left-behind – first in policy making"

Policy solutions include: support just transition policies; green job creation planning; inclusive policy dialogue spaces; working with grassroots/local movements; basic income/services models.

Valuing nature

"Making the different values of nature – economic, social, environmental – visible in decision making."

Policy solutions include: natural capital accounts and governance bodies; use of non-economic values in impact assessments; investing in natural infrastructure; conservation reform.
"I don’t want your hope, I don’t want you to be hopeful. I want you to panic. And act as if the house was on fire."
Greta Thunberg, climate activist

"A transition to a green and low-carbon economy is not a niche nor is it a "nice to have" for the happy few. It is crucial for our own survival. There is no alternative"
Frank Elderson, Governing Board of De Nederlandsche Bank and Chair of the Network for Greening the Financial System

"The transition to the "green economy," in which we rely on renewable energy, won’t happen on its own, however. It will require a mobilization of resources – the kind we saw during the New Deal and the Second World War. Government will have to take the lead, and it will require public investments – including in infrastructure and research – and regulation"
Joseph E. Stiglitz, University Professor of Economics at Columbia University
The year the world woke up to the crisis?

"A 2°C world might be insurable, A 4°C world certainly would not be"
Thomas Buberl, CEO of AXA Insurance

"We face a direct existential threat"
António Guterres, United Nations Secretary-General

"We need a grand super-coalition of decent human beings willing to think out of the box. We must have free and fair economies; and gender equality and workers’ rights must form part of an inclusive green economy"
Kumi Naidoo, Secretary General Amnesty International

"For every degree of warming you get a one percent collapse in growth. So just do the maths.... We’re heading for about four (degrees). That crashes the global economy"
Gail Bradbrook, Co-founder of the Extinction Rebellion
Measuring and governing

Are our institutions fit for driving a transition?

The scale and speed of the global transition hinges on our governance systems and institutions. As the transition gets underway, we would expect to see the SDGs starting to shape economic plans and decisions; a new set of global institutions to emerge to support governments to undertake a green economic transition; and new ways to measure progress being put in place.

Key points

- The SDGs have become a rallying point for businesses and governments but they have yet to significantly shift decision making or core business strategies.
- A handful of countries have taken decisive steps to go beyond GDP but more widely the mantra of economic growth dominates.
- New international institutions have emerged to support governments green their economies, but no country has yet undertaken a full transformation and legal frameworks are woefully lacking.
A handful of countries are using the SDGs to make decisions: Ten years ago, the SDGs had yet to be defined or agreed. A decade later, 193 countries have signed up to the SDGs and 47 countries have now developed “voluntary national reviews” – more detailed action plans of their progress. In some cases, the SDGs have already started to shape national planning systems. For example, Ethiopia and Finland have adopted long-term plans that encompass equity, climate resilience and carbon neutrality in an integrated way. Colombia is using the SDGs to benchmark local planning and development decisions. The Czech sustainable development agenda is coordinated at the national level by a committee chaired by the Prime Minister.

Some countries have incorporated the SDGs into their wider corporate reporting requirements. In France, legislation on the disclosure of CSR information has been in force for the past 15 years, and most French companies listed on the French stock market index communicate about their engagement with the SDGs.

More broadly, one of the more unexpected trends of the last decade is that businesses have taken on SDGs language in their external communications and their sustainability reporting frameworks. Most companies have homed in on individual Goals rather than the SDGs as an integrated framework. As a result, a company may develop large-scale renewable energy projects in support of Goal 7 – Affordable and Clean Energy – but displace communities and undermine rights to food, access to water, health, culture and livelihoods in the process. There are a few who have started to engage with them at a more core business level. For example, Danone reports on its contribution to the SDGs in its Integrated Annual Report, while Unilever benchmarks its growth strategy against the SDG framework.

The case for going beyond GDP has grown: Last year, co-chairs of the OECD-hosted High-Level Expert Group on the Measurement of Economic Performance and Social Progress, Joseph E. Stiglitz, Jean-Paul Fitoussi and Martine Durand, published a review of the limitations of GDP as a metric of economic progress. Specifically, they point to how an over-reliance on GDP as the yardstick of economic performance misled policy makers in the lead up to the 2008 financial crisis.

The UN Environment Programme’s 2018 Inclusive Wealth Report, which was curated by more than 200 economists from around the world showed that rising wealth has come at the expense of the environment: 44 countries have experienced a decline in inclusive wealth per capita since 1992 even though GDP per capita has increased in almost all of them.

Some governments have taken decisive steps to move beyond GDP: In December 2018, New Zealand published its Living Standards Framework, which aims to advise successive governments about the likely effects of their policy choices on people’s living standards. Crucially, it tracks wellbeing measures such as environment, housing, income and consumption into the Treasury’s cost benefit tool, enabling agencies to show how their initiatives are expected to impact on current and future wellbeing, as part of the Budget process. Scotland’s First Minister Nicola Sturgeon has become a vocal advocate on wellbeing. The country now reports on wellbeing under their National Performance Framework, which brings together economic, social and environmental factors.

"I’m heartened by the increased focus on measuring what matters at the highest levels of governance. The Wellbeing Economy Governments partnership (WEGo) – made up so far of Scotland, Iceland and New Zealand – is showing real leadership in this space. At the OECD, the EC, nation-state level and beyond, it feels that, not before time, the question being asked is increasingly along the lines of ‘what can growth do for wellbeing?’, and not the other way around."

Katherine Trebeck, Knowledge and Policy Lead at the Wellbeing Economy Alliance
The Netherlands now tracks 21 wellbeing trends which range from health and housing to security and environment. At the request of the Dutch Cabinet, this will now be produced on an annual basis by Statistics Netherlands. Last year the Belgian Federal Planning Bureau released an updated set of indicators complementary to GDP, together with a report presenting results, the fourth since 2016. In France, the government is legally required to annually evaluate wealth indicators beyond GDP, such as subjective well-being, income inequality, poverty, early interrupted education, carbon footprint and land-use change. The law requires the government to submit to Parliament an annual report tracking progress on these indicators and assessing potential budget impacts of the proposed actions along with its budget bill.

However, despite all the evidence of the limitations of GDP as a measure of progress, it continues to dominate national decision-making in all areas.

"Ensuring the long-lasting engagement of finance ministries, economic planners and cross-government policy development remains a significant challenge. Economic planners remain wedded to the Kuznet curve."

Steve Bass, International Institute for Environment and Development

EXAMPLE: In December 2018, the New Zealand Treasury published its Living Standards Framework (LSF), pointing to a significant shift in how the country approaches public policy. The LSF places financial considerations alongside three other pillars of well-being: natural capital, human capital, and social capital. "We are making sure that we don’t just look at New Zealand’s financial health but also at the wellbeing of our people, the health of our environment, and the strength of our communities," Finance Minister Grant Robertson said. All new spending must advance one of five government priorities: improving mental health, reducing child poverty, addressing the inequalities faced by indigenous Maori and Pacific island people, thriving in a digital age, and transitioning to a low-emission, sustainable economy.
New economic institutions are emerging to support the transition to greener economies. The UN Partnership for Action on Green Economy (UNPAGE), a cross UN initiative bringing together the key agencies on environment, development, labour, industry and research, has continued to grow. With the addition in 2018 of Argentina, Guatemala, India, Indonesia and Kazakhstan, 18 partner countries are now part of the PAGE family. Working upstream to inform economic and development planning, UNPAGE’s successes include supporting Guyana’s Green State Development Strategy and Uruguay’s National Environmental Plan for Sustainable Development and Mongolia’s National Green Development Plan. Peru is also reconciling the SDGs, the goals of the Paris Agreement and national priorities for accessing the OECD in formulating its Vision for Peru by 2050. UNPAGE has also trained more than 3,100 individuals at the global, national and sub-national level on pathways to a greener and more inclusive economy.

“We would give the transition to a green economy in Mongolia a 4 out of 10. It is possible for Mongolia to transition towards a greener economy as the country has a National Green Development Policy and a clearly set Sustainable Development Vision 2030. Compared to just a few years ago, there seems to be a much greater awareness about the importance of greening the economy and policymakers are more aware of the current stance. But a lack of political will is the biggest roadblock for greening the economy. As a mining driven economy, dependence on election and business cycles is high and populism often hinders green economy priorities.”

Odonchimeg Ikhbayar, Economic Policy and Competitiveness Research Center, GEC Mongolia hub
Despite the increase in evidence, solutions and support, no government is yet pursuing a deep-rooted green economic reform agenda.

The Global Green Growth Institute (GGGI) has partnered with 27 governments to support their green growth planning and implementation approach. They have helped to increase green and climate investment from $105 million to $524.6 million in 2017. The OECD continues to champion green growth. Since publishing its Declaration on Green Growth in 2009, 46 countries have now signed up to it, including Bulgaria, Costa Rica, Colombia, Croatia, Georgia, Kazakhstan, Latvia, Lithuania, Morocco, Peru and Tunisia. Building on its 2011 Green Growth Strategy, the OECD is mainstreaming green growth in its national and multilateral policy surveillance exercises to provide policy advice that is targeted to the needs of individual countries. These include the Economic Surveys, Environmental Performance Reviews, Innovation Reviews, and Investment Policy Reviews, as well as the Going for Growth annual report and the Green Cities Programme.

The European Union has been a major player in driving and investing in the green economy, already dedicating 20% of its current budget towards decarbonising activities and driving a clean energy transition. The current expectation is that it will increase that funding to 25% in the next 7 year budget (2021-2027) under the new European Green Deal. This landmark green investment plan is aiming to leverage €1tr over the next decade in a bid to kickstart the EU’s transition to a net zero economy by 2050 and turn Europe into the world’s first climate neutral continent. The plan starts from 2020 and will involve stricter emissions limits for industries from cars to chemicals, revamped energy taxes, greener farming, new state-aid rules for companies and possibly an environmental import tax. It also includes the Just Transition Mechanism to help countries with high employment in coal, lignite, oil shale and peat production, as well as territories with carbon-intensive industries, alleviate the social and economic costs of the climate transition.

But no single country has yet embraced a green and inclusive transition: Despite the increase in evidence, solutions and support, no government is yet pursuing a deep-rooted green economic reform agenda and legal frameworks are woefully lacking. Even though Ministries of Finance and planning have started to engage in issues of climate change and environmental loss in some parts of the world, they are still wedded to notions of “grow now, clean up later” or just “do less harm.”
There has also been a gulf between rhetoric and reality in many countries. South Africa’s 2011 Green Economy Accord, a joint national statement between the government, civil society and trade unions to pursue a different growth model, was characterised as “one of the most comprehensive social partnerships on the green economy anywhere in the world” by then South African President Jacob Zuma and “groundbreaking” by leading trade unionist Zwelinzima Vavi.

Yet, our partners in South Africa, the Trade & Industrial Policies Strategies (TIPS) stress that the renewable energy transition is now stuck in a gridlock between the national power utility and independent power producers. TIPS argue that small, micro and informal enterprises have been forgotten in national efforts to grow and green the economy; and that natural capital is yet to be incorporated in South Africa’s policy and decision making processes. In their Green Economy Barometer, they conclude that “The Green Economy Accord was more a public relations exercise than the creation of a social compact on the transition”.

Similarly, in the Caribbean, our partner CANARI reports that inclusive green economic planning has not been mainstreamed into core decision making processes.

"In the Caribbean region, although economic and financial agencies and Ministries have been tangentially involved in regional and global discussions on international green growth and climate finance initiatives, these do not yet focus on inclusive green economy outcomes, on mainstreaming green economy into the national economic planning process or on the wider enabling economic environment. This, of course, leaves many aspects of the economic status quo unchanged."

Nicole Leotaud, Executive Director, CANARI
Are new financial systems emerging?

Finance is the lifeblood of a transition to a greener economy. As the transition gets underway, we would expect to see a new regulatory framework emerging – one that not only encourages green and social investment but also penalises “brown” and short-termist investment; one that enforces social and environmental reporting at all levels; one that encourages the decentralisation of the capital markets towards smaller, purpose-driven banks.

Key points

- Central banks, insurers and supervisory bodies are ringing the climate emergency bell; the divestment movement continues to grow; and new forms of social and green investment are taking off.

- But green and social investment is still dwarfed by spending on the "brown" economy and public subsidies for fossil fuels.

- Sustainable financial policy is increasing but there is still no coherent public policy approach, national or global, which is equipped to meet the scale of the challenge.
Central bankers around the world are sounding the alarm: In April 2019, the governors of the Bank of England and the Banque de France jointly issued a stark warning of the potentially dire consequences of unchecked climate change: "if companies and industries fail to adjust to this new world, they will fail to exist". The statement was co-signed by the Network for Greening the Financial System (NGFS), a group of 36 central banks representing five continents, half the world’s global greenhouse gas emissions and two-thirds of the world’s systemically important banks and insurers (see example).

Sustainable financial policy is increasing: Over the last decade there has been a sharp increase in the number of national, local and regional policies supporting more sustainable finance. From 2013 to 2017 such policies doubled to 300 in 54 jurisdictions. For the first time, national level roadmaps for green and sustainable finance exist in China, the EU, Italy, Indonesia and Morocco. However, at large, there is still no global regulatory or coherent policy framework aimed at moving financial markets away from brown investments and portfolios.

Financial system lobbying remains heavily dominated by major polluters and extractive industries. Over the past two decades lobby groups have spent more than US$2bn in attempts to influence climate change legislation in the United States. While in Brussels alone, financial sector lobbyists outnumber civil society groups by 7:1.

"We would score the pace of transition in the financial markets between 1 and 3: "Financial institutions, investors and regulators are starting to acknowledge climate-related financial risks. But there is still no champion for a fully integrated and comprehensive "Finance for nature" regulatory framework; progress in developing countries lacks capital; progress in developed countries is dominated by too-big-to-fail bank business models, and by financial institutions blind to long-term risks; there is a large historical legacy of financing unsustainable - but profitable – activities; progress in finance is impeded by a lack of progress in the underlying economy, which still follows unsustainable patterns."

Benoit Lallemand, Executive Director, Finance Watch
Social bonds have taken off but still account for only a fraction of the market: The global impact investment market was worth $228 billion in 2018, double its value of $114 billion in 2017. The surge coincides with growing awareness of climate change, and environmental, social and governance issues affecting the planet, which has in turn influenced the approach of big investment banks and institutions.

For example, Blackrock, the world’s largest investment firm managing over $6 trillion of assets, is now urging companies to consider their societal responsibilities; while UBS has committed to investing at least $5 billion of private client assets to impact investing related to the SDGs.

Green bonds have seen their popularity increasing: Cumulative green bond issuance since 2007 has reached $521 billion, with the United States leading the way with $118.6 billion worth of green bonds issued, followed by China ($77.5 billion) and France ($56.7 billion).

Last year saw an increase of bonds issued by developing countries and by the private sector. According to the Standard & Poor’s the market has been spurred on by “strengthening regulations, rising environmental risk awareness and new business opportunities”.

EXAMPLE: Developing countries are now entering the green bond market. São Paolo has become a centre of expertise in green bonds, with Brazil surpassing 11 billion reals in issuances in 2017. In the last two years Brazil has seen 9 green bond issuances, five of them in the international market. Political capital has been poured into the launch of the UK-Brazil Green Finance Partnership, in a commitment to promote sustainable economic growth.

**Cumulative green bond issuance since 2007 has reached $521 billion.**
Despite the positive trend, the green bond market currently constitutes under 1% of the total bond market. No globally accepted standards have been agreed, so green bonds cannot be independently verified and compared across countries and projects. In short, there is no guarantee that these investments are reducing our impact on the planet.

Money is being divested from fossil fuels: The divestment movement continues to gather pace. By the end of last year, it had secured a total of $8 trillion in divestment commitments from pension funds, academic institutions, philanthropic foundations and other institutions. Institutional investors committed to cutting fossil fuel stocks from their portfolios have risen from 180 to 2014 to 1,100 today. Last year Shell announced that divestment should be considered a “material risk” to their investors; while Goldman Sachs said the “divestment movement has been a key driver of the coal sector’s 60% de-rating over the past five years”.

**EXAMPLE:** In 2019, the Norwegian government mandated its sovereign wealth fund, the biggest such wealth fund, to divest from pure oil and gas explorers. It will sell stakes in 134 companies. The proposal would see the fund sell about $7.5 billion in stocks. "It reflects to a larger extent the risk we ourselves have – the bulk of the state’s exposure in Norway is upstream activity," Finance Minister Siv Jensen said. "We’re reducing our vulnerability by choosing to withdraw the fund gradually from this segment.”
But investment in fossil fuels continues at pace:
Divestment from fossil fuels has increased in the past decade, but so too has investment in fossil fuels. According to BankTrack, 36 of the world’s biggest banks funnelled $115 billion into “extreme” fossil fuels in 2017, an increase of 11% from 2016, driven by increased financing of the tar sands sector. Financing for highly polluting tar sands projects grew by 111% from 2016 to 2017 to $47 billion. As a result, tar sands have overtaken coal power as the most heavily funded extreme energy sector.

In another alarming development, 14 European banks increased their coal financing by more than $2 billion in 2017. Yet this is overshadowed by the amount of money Agricultural Bank of China, Bank of China, China Construction Bank, and ICBC poured into coal. In fact, last year these four banks were responsible for 71% of financing from major global banks for the coal mining subsector, and 55% of financing for coal power.

Fossil fuel subsidies show no sign of decreasing:
The world spent a staggering $5.2 trillion on fossil fuel subsidies in 2017, which represents 6.5% of global GDP. China, the US, Russia, the EU, and India are the highest spenders. Despite repeated commitments, not only have G7 governments taken limited action to address fossil fuel subsidies but they have also failed to put in place any mechanisms to define and document the full extent of their support to oil, gas and coal, or to hold themselves accountable for achieving these pledges.

1 Bank Track define “extreme” fossil fuels as oil (tar sands, Arctic, and ultra-deepwater oil), liquefied natural gas (LNG) export, coal mining, and coal power.
The world spent a staggering $5.2 trillion on fossil fuel subsidies in 2017, representing 6.5% of global GDP.

Calls for carbon pricing are coming from all corners: Currently, 87% of greenhouse gas emissions do not face any kind of carbon price at all. That means that it is free to put carbon into the atmosphere for the vast majority of corporations, governments and citizens. This is beginning to change. There are 46 national and 28 subnational jurisdictions putting a price on carbon, with a sharp rise in the last decade. CEOs and other business leaders increasingly agree on the necessity of setting a carbon price. In the United States, CEOs and other representatives of more than 75 US businesses and trade associations, with a combined value of nearly $2.5 trillion, are calling for federal climate action including carbon pricing.

In January 2019, 43 of the world’s most eminent economists signed a statement published in the Wall Street Journal calling for a US carbon tax. The list included 27 Nobel laureates, four former chairs of the Federal Reserve, and nearly every former chair of the US Council of Economic Advisers since the 1970s, both Republican and Democratic.

87% of greenhouse gas emissions do not face any kind of carbon price at all.
Are our sectors changing?

A new industrial revolution is required to transform our energy, food, and infrastructure systems. As the transition goes to scale, we would expect subsidies for "brown" energy to be replaced by incentives for decentralised renewable energy systems; a shift in financial flows towards agroecological approaches; and global certification and regulation for sustainable infrastructure.

Key points

- The renewable energy transition is underway and gathering pace, and for the first time is generating more jobs than the fossil fuel sector. But smaller renewable energy providers are being squeezed out as governments shift to market-based bidding over subsidies.

- Agricultural policy making still favours efficiency and productivity over nutrition and quality.

- Infrastructure appears to have been largely forgotten by green economics.
The energy transformation?

**Coal is dying in the US and Europe:** Scotland has closed its last coal plant; **France** is on track to shut down their remaining coal power plants by 2022. Recently the **United States** has accounted for over half the number of coal-fired power plants being retired globally, despite efforts by the Trump administration to prevent the closure of aging plants.

However, with the exception of **Vietnam** which cancelled its coal ventures last year, coal continues to grow apace in Asia. State-owned financial agencies in **China**, **Japan**, and **South Korea** have emerged as the largest sources of funding for coal plants outside their borders. A new report by the China Electricity Council, which represents the country’s power utilities, proposes setting the country’s coal capacity cap at 1,300 gigawatts, a level that would allow 290 gigawatts of new capacity to be added – more than the entire coal fleet of the United States.

**Renewable energy is now cheaper than fossil fuels:** Renewable energy has entered a virtuous cycle of falling costs, increasing deployment and accelerated technological progress. Solar PV module prices have fallen by around 80% since the end of 2009, while wind turbine prices have fallen by 30–40%. Globally, onshore wind schemes now cost an average of $0.06 per kilowatt hour (kWh), (some schemes are coming in as low as $0.04 per KwH), while the cost of solar PV is down to $0.10 per KwH. In comparison, fossil fuel-based energy typically falls in a range of $0.05 to $0.17 per KwH.

**EXAMPLE:** New solar champions. India has announced ambitious energy policy to support the roll out of solar energy. The government is providing INR 15,000 crore (209 billion USD) as capital subsidy to promote the massive expansion of rooftop solar projects in towns and cities. The central subsidy presently covers 30 percent of the expenses incurred in installing a small rooftop solar plant.

Global oil and gas capital expenditures set to increase

![Graph showing global oil and gas capital expenditures from 1965 to 2016](image_url)

*Source: BP Statistical Review of Global energy; reproduced by Our World in Data*
The renewable energy sector is starting to generate more jobs than fossil fuels: Since 2013 more than $1 trillion has been invested in renewable energy around the world, and today the industry is generating 10.3 million jobs.

The leading renewable energy job markets to date have been China, Brazil, the US, India, Japan and Germany. In the US, more people were employed in solar power last year than in generating electricity through coal, gas and oil energy combined. Furthermore, the US solar industry is more gender diverse than its fossil fuel industry, with women representing 27% of the solar workforce. In general, women seem to hold a higher share in total renewable energy jobs than in the overall energy industry, at about 20 to 25%.

**EXAMPLE:** In Germany, the transition away from fossil fuels and into a new energy economy is called Energiewende. Germany established an Energy and Climate Fund in 2010, funded initially through various emissions auctions, revenues and capital from nuclear power arrangements. Now it is funded primarily through taxes on energy consumption. Generally, acceptance for the transition is high, even with the consumption tax that places a high energy burden on some residents, which means more than 5% of their income is spent on energy. The fund pays municipalities and private companies for energy improvements in the form of capital costs, subsidies and outright buyouts in the case of nuclear energy. There is no comparable fund for social costs, although people are compensated for resettlement in instances where lignite mining has expanded.

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**Renewable energy jobs in selected countries**

Source: IRENA
Since 2013 more than $1 trillion has been invested in renewable energy around the world, and today the industry is generating 11 million jobs.

But reduced subsidies for renewable energy is hitting small providers the hardest: In the last two years countries from the UK to Mexico, Germany and Morocco are partially or wholly switching from feed-in tariffs to market-based competitive bidding for renewable energy. In all, 67 countries had renewable tender policies by early 2017, up from 9 in 2009. The International Energy Agency estimates almost half of the renewable energy capacity expected to be added from 2017-22 will be driven by auctions. Cheap, unsubsidised renewable power gives countries a solid economic reason to switch from fossil fuel energy, but small and community energy groups are finding it difficult to compete in the new renewable market.

"We would give the South African transition to a fair, green economy a 5 out of 10. For the first time national electricity policy acknowledges that a mix based on renewable energy and gas would the most cost effective pathway; and no new coal plants are planned. A carbon tax and a new Climate Change Act are both underway. The launch of the Good Deeds Campaign against littering and illegal dumping also marks progress. But the key blocking point is the vested interests in protecting incumbents in carbon-intensive activities (in coal, liquid fuels and heavy industry). High poverty, high unemployment and very high inequality is also preventing the transition rather than fostering it."

Gaylor Montmasson-Clair, Trade and Industrial Policies (GEC South Africa)

The food transformation?

Organic farming is booming in Europe: Consumers are increasingly concerned about the nutrition and quality of the food they eat. In Europe, which consumes the most organic food in the world after the United States, organic farming continues to grow. Germany’s market in organic food is worth 10 billion euros, making it the European leader in organic food ahead of France, which has a market worth 7.8 billion euros. In Denmark, the government has invested 147 million euros in the last year to support organic farmers and help farmers convert to organic production. A government-run certification programme also provides certification free of cost to operators. Danish consumers are referred to as the most “pro-organic” consumers in the world, buying 13.3% of all organic products. Austria has also shown leadership, investing 168 million euros to help organic farmers and raise public awareness about the benefits of organic food. Today it has the highest number of organic farms in the EU.

Developing countries are also acting: The Thai government has launched National Agenda’s Organic Agriculture, a 5-year programme aimed at supporting more than four million farmers to switch from agro-chemicals to organic inputs instead. The programme aims to reduce the total import of agro-chemicals by 50%, as well as boost organic exports by 100% annually; and provide farmers with financial support to assist them in buying organic seeds. In India, the Paramparagat Krishi Vikas Yojana scheme was launched in 2015 to support organic agriculture. With a budget of around 41 million euros, it aims to increase domestic production and certification of organic produce by involving farmers.
Agroecological approaches are emerging: Agroecological production takes a step further than organic farming by looking not only at the conditions under which food is grown, but also taking into consideration the health of the ecology and local communities. Brazil has launched a national policy for agroecology, that links production, nutrition, health and education. The policy was developed in close partnership with farmers and communities, and led to 5,300 municipalities spending 30% or more of their school meal budgets on organic and agroecological products from family farmers (some municipalities even reach 100%); supporting rural family farming organisations; and helping agroecological organisations to expand, benefitting about 132,744 farming families. According to an assessment by the World Future Council, this led to "visible large-scale improvements for smallholder farmers and vulnerable populations in Brazil". In 2014, France passed a legal framework on the future of agriculture. It has also been mainstreaming agroecological principles across all of its departments and aims to have converted half of all farms to agroecology farming by 2025.

But agriculture is still dominated by a focus on efficiency and productivity: The global organic market is expected to reach $100 billion by 2020, showing a sharp and steady increase. However, this represents a tiny proportion of the global market in non-organic produce of $5 trillion. In Europe, 70% of all agricultural subsidies are still granted without meeting goals including conserving the environment, keeping animals in appropriate conditions, protecting water, birds and insects, and maintaining life and livelihoods in rural areas. 3% of the EU’s biggest farms use more than half of the land for agriculture across the entire region.

"Politicians seem very reluctant to drive through a massively innovative new economic model that could unleash the green economy. Mainly because this is of course hugely uncertain/unknown so the risks are something they do not understand, and we seem to lack political leaders with vision who can ‘lead’. This is due to decades of corporate lobbying and blurring between the public and private spheres."

Aled Jones, Global Sustainability Institute

In Europe, 70% of all agricultural subsidies are still granted without meeting goals including conserving the environment.
The infrastructure transition?

Most of world's planned or existing infrastructure is "brown": Around 70% of global greenhouse gas emissions come from carbon-intensive infrastructure. Estimates suggest that $94 trillion in new investment is required by 2030 to keep warming below 2°C. This would be equivalent to a doubling of the world's capital stock, with over two-thirds built in developing countries. But unless that new infrastructure is sustainable, low carbon, energy efficient, and pro-biodiversity, the world will be locked into a high carbon pathway.

Unfortunately, very little progress has been towards shifting the economics towards more sustainable infrastructure. Final energy use by buildings grew from 119 exajoules (EJ) in 2010 to nearly 125 EJ in 2016. Fossil fuel use in buildings has remained almost constant since 2010 at roughly 45 EJ. CO₂ emissions from buildings construction grew steadily, from 3.1 GtCO₂ in 2010 to around 3.7 GtCO₂ in 2016. Green economics appear to have entirely bypassed the infrastructure and construction business.

However, there are positive indications that investment for greener infrastructure is rising: Green bonds for railways are growing, especially in urban areas, as the reduction of carbon dioxide emissions in densely populated regions is a high priority for local stakeholders. In the United States, municipal green bond issuance grew from about $5 billion in 2017 to almost $9 billion in 2018, with most of the funding in 2017 for transportation sector bonds. But overall, institutional investors allocate only about 1% of their global capital to sustainable infrastructure, mainly due to the high risks of investing in it.

CHINA’S BELT & ROAD: global green infrastructure opportunity, or ecological disaster?

The Belt & Road Initiative (BRI) is "the most ambitious infrastructure investment project in history". A $400 billion web of ports, railways, roads, bridges and power lines that will span from East Asia to the heart of Europe, the BRI will transform trade, globalisation and international security for generations. The World Bank believes it could help lift 32 million out of poverty, while Chinese President Xi Jinping has insisted that the BRI will be "green, low-carbon, circular and sustainable."

But not everyone is convinced. Dr William Laurance of James Cook University in Australia, a global expert on major infrastructure projects, has described the BRI as the "riskiest environmental project in history." Serious impacts – on pollution, ecosystem loss, carbon emissions, and local communities – are already emerging, with regulations and green safeguards weak and poorly enforced. WWF warns that planned BRI projects threaten the habitats of 265 endangered species, including disappearing populations of giant pandas, Siberian tigers and saiga antelopes.

BRI investments so far have overwhelmingly favoured polluting fossil fuels, making up 60% of BRI energy spending compared to just 6% for wind and solar. BRI projects already include over $35 billion for 102GW of new coal plant projects in 27 countries – one quarter of the global total coal under construction, and more than enough coal to blow the world’s remaining carbon budget.
Tackling inequality

Is the transition fair?

In a world of finite resources, "prosperity for all" means that richer countries, companies and individuals are expected to take the lead in consuming fewer resources and helping lift people out of poverty. To deliver a greener, fairer economy we would expect to see substantial investment in social protection, the emergence of a new global taxation regime and a sharp increase in social enterprise models.

Key points

- Despite economic growth, the gap between the rich and the poor is increasing nearly everywhere.
- Inequality is driving demand for radical global change.
- Calls for a Green New Deal, which brings the social and environmental agenda together, have gone global.
The gap between the richest and the poorest is increasing nearly everywhere

Since 1980, the share of national income going to the richest 1% has increased rapidly in North America (defined here as the United States and Canada), China, India and Russia, and more moderately in Europe.

The pace of global poverty reduction halved between 2013 and 2015, and the number of people living in extreme poverty in sub-Saharan Africa has increased from 278 million in 1990 to 413 million in 2015.

This contrasts with the steady accumulation of wealth at the top: in 2018 alone, the wealth of the world’s 1,900 billionaires increased by $2.5bn each day. Extreme climate events – floods, heat, storms and droughts – have doubled since the early 1990s and are driving poverty. The poorest half of the global population is responsible for only around 10% of total global emissions, while the richest 10% are responsible for around 50%.

According to the World Inequality Report, since 1980 very large transfers of public to private wealth occurred in nearly all countries, whether rich or emerging. National wealth has substantially increased, public wealth is now negative or close to zero in rich countries.

The rise of private capital and the fall of public wealth in rich countries, 1970 – 2016

Source: World Inequality Report 2018

2 Public wealth means public assets minus public debts. The sum of private and public wealth is equal to national wealth.
Across the OECD, real wages have been stagnating for three decades.

People are being left behind in both rich and poor countries: Across the OECD, real wages have been stagnating for three decades. Contrary to historical trends, wages are no longer growing in parallel to increases in productivity, profits or employment. Jobs are paying less today than ever before. At the same time, the informal economy is still expanding, despite global GDP growth in the last decade. More than 60% of the world’s employed population work in the informal economy, a proportion that has grown in the wake of global financial crises and upheavals. While not all informal workers are poor, poverty rates are higher among workers in the informal economy. The majority lack social protection, rights at work and decent working conditions.

In addition to these trends, the future of work is looking increasingly precarious as automation takes hold. For example, some 32% of all jobs in the OECD stand to be substantially changed or made redundant by automation.

We would grade the progress on a fair transition 4 out of 10: Inequality is definitely now a leading global issue and is increasingly being linked with environmental and sustainability issues. But we can see in the rise of populism and increasing numbers of demagogic leaders across the globe that there is a concerted push-back underway from those vested interests that feel threatened by the growing movements for equality in its various economic, social and political forms.

Dr Wanda Wyporska, Executive Director, The Equality Trust

Citizens want a system that fights inequality: Countless surveys of public opinion point to the same urgent desire for change. The 2019 edition of the Edelman Trust Barometer, which measures trust in institutions including businesses, government and NGOs, reveals that only one in five people believe their economies are working for them, with nearly half of the “mass population” believing that the system is failing them.

Millennials comprise a majority of the workforce in many countries, and their power will likely grow over time. Deloitte’s 2018 survey of 11,000 businesses finds that we are witnessing seismic changes in the workforce, the workplace, and workplace technologies: “Organisations are no longer assessed based only on traditional metrics such as financial performance, or even the quality of their products or services. Rather, organisations today are increasingly judged on the basis of their relationships with their workers, their customers, and their communities, as well as their impact on society at large.”

For the first time in developed economies, young people believe that their lives will be worse than their parents’—and they are actively questioning the core premises of corporate behaviour and the economic and social principles that guide it. Some 86% of millennials think that business success should be measured in terms of more than just financial performance.

3 The Edelman Trust Barometer makes a distinction between the “Informed Public”, which represent college educated, in the top 25% income per age group and reports significant media consumption, and the “mass population” makes up the remaining public.
Furthermore, a recent poll in the United States found that Generation Z has a more positive view of the word "socialism" than previous generations, and — along with millennials — are more likely to embrace socialistic policies and principles than past generations.

Disillusionment with the current political and economic system is making itself felt across the world. The world’s largest democracies are now led by populist leaders – India (pop 1.3 billion), United States (pop 329 m), Indonesia (pop 268 million), Brazil (pop 209 million) and Mexico (pop 129 million). This group represents 2.2 billion people or 28.6 per cent of the 7.7 billion total world population. The rising gap between the rich and the poor directly impacts green policymaking. The "gilets jaunes" protests in France were, in part, a response to carbon taxes hitting the poorest the hardest. In the past, South African miners have protested against renewable energy investments, while efforts to phase out fossil fuel subsidies in Nigeria have brought citizens on to the street in protest.

EXAMPLE: Spain leads a fair green transition: Spain is phasing out all coal production subsidies in order to meet European Union requirements. This plan, along with lower coal prices on global markets, will put the country’s remaining 40,000 coal miners out of work. The government will plough €285 million into compensation payments and retraining schemes for coal miners over the coming decade. Miners previously protested their economic grievances on the government’s doorstep in Madrid. The coming year will reveal whether miners consider this new social safety net to be adequate to support them and their families.

A dawn of small, socially orientated businesses: A new wave of social enterprises and purpose-driven businesses are emerging. Not only are they tackling social and environmental issues but they also tend to be more diverse and inclusive than conventional purely profit-driven businesses. In the UK, certified B Corps are growing 28 times faster than the national economic growth rate of 0.5% and offer more diversity than their traditional counterparts, with many more being led by women and people from ethnic minorities and people with a disability. Similarly, cooperatives are on the rise. In the past decade, the number of worker-owned cooperatives in the United States has almost doubled from roughly 350 companies to nearly 600. This growth has primarily taken place in communities of colour and immigrant communities. In India small businesses are increasingly being recognised by government policy as part of their push to expand manufacturing and young entrepreneurship.

"We would give the transition to green economies in India a score 6 out of 10. The government has subsidised a massive expansion of rooftop solar projects in towns and cities. The country has doubled its solar capacity since 2015 and inspired other developing countries. It is also now recognising the role of small businesses to power a fair transition through initiatives such as Make in India and Startup India. But economic growth is being pursued at all costs – and India has now been ranked as the fourth worst country in the world for the environment. At the same time, jobless growth is now a reality."

Anshul Bhamra – Development Alternatives, GEC India hub.
More broadly, our partners and hubs report that small enterprises and informal workers are being left behind by green policy frameworks and financing opportunities. National and local green economy plans make little or no reference to informal workers, yet the informal economy represents up to 70% of developing country economic activity and is how the poorest generate their livelihoods. It is also smaller enterprises that are the most exposed to environmental loss and least prepared for climate change.

**Universal Basic Income for all:** The call for a universal basic income (UBI), a system in which everyone receives regular, unconditional cash payments that are designed to be enough to live on has grown louder over the last few years. The concept has taken off in the United States, where a recent poll found that 48% of Americans support a basic income. Pilots of such programmes are underway in Finland and Canada. India – with a population of more than 1.3 billion people – is also considering establishing a universal basic income.

However, research conducted for Public Services International, a global trade union federation, raised doubts about the merits of the scheme. Reviewing 16 UBI projects for the first time, researchers found no evidence to suggest that such a scheme could be sustained for all individuals in any country in the short, medium or longer term – or that this approach could achieve lasting improvements in wellbeing or equality. The report concluded that the money needed to pay for an adequate UBI scheme "would be better spent on reforming social protection systems and building more and better-quality public services". Finland have decided to end their UBI trial in favour of investing in other welfare systems.

**Growing calls for reform of the global tax regime:**
The call for a new global tax regime to generate more revenue for services to level out inequality, is coming from civil society and international institutions alike. Poorer countries collectively lose approximately $200 billion in revenue a year, or 1.3% of GDP, due to companies shifting profits to low-tax locations.

**EXAMPLE:** GEC Peru hub, Libelula, has built a network of more than 170 small green enterprises, representing thousands of employees, working together to share ideas, connect with investors, and campaign for new regulation. A thriving Economia Verde online platform provides tools, opportunities and events, and the network has successfully campaigned for a new law on social enterprises – helping the sector deliver record growth. [https://economiaverde.pe](https://economiaverde.pe)
Poorer countries collectively lose approximately $200 billion in revenue a year, or 1.3% of GDP, due to companies shifting profits to low-tax locations.

“\textit{The bottom line is that the current international corporate tax architecture is fundamentally out of date.}” Christine Lagarde, IMF Managing Director, said. G20 Finance Ministers are set to start a new round of negotiations on international tax reforms. Solutions put forward include ensuring a multinational’s home country imposes at least some tax, no matter where the profit is made; and creating a system that routinely taxes profits on the basic activities in the country in which they take place.

\textbf{A Green New Deal goes global:} Interest in a Green New Deal (GND) – an ambitious government-led investment programme inspired by Franklin D Roosevelt’s New Deal to respond to the Great Depression – have been around for some decades. However, there has been increased momentum behind it in recent months. In November 2018, young American climate activists occupied the office of House Speaker Nancy Pelosi to demand that Democrats adopt an ambitious GND as party policy – and succeeded. Since that first protest, the idea of a new deal for nature has helped inspire a people’s movement for climate action around the world.

In the UK, a cross-party group of MPs jointly tabled a Green New Deal for the UK, followed swiftly by similar EU-wide proposals from the Democracy in Europe Movement 2025. In Spain, a Green New Deal manifesto propelled the Socialist Party to re-election and increased its vote even in coal country. And in May 2019, a coalition of young people, workers, Indigenous leaders, artists and scientists launched their campaign for a Canadian GND that would halve emissions inside 11 years.

However, by far the most ambitions GND initiative has been put forward by the EU and is promising a 1 trillion euros worth of public and private investment over the next decade including a Just Transition mechanism (see page 20).

\textit{"I give the transition to green and fair economies a 3 out of 10. There are real reasons for hope including public recognition of the climate crisis; the spread of renewable energy; the surge in action by states, cities and communities; the disinvestment movement; and the beginning of the end of coal, among others. But the transition is still hampered by powerful vested interests, inadequate leadership and action by national governments; continued buy into a discredited economic growth model and growth in energy demand plus the often unequal design of carbon mitigation policies and programmes"}

Ruth Mayne, Senior Researcher, Oxfam

Recent GND campaigns may differ on policy details, but they’ve got much in common. Firstly, they are inspired by grassroots citizen movements: the Sunrise Movement in the US, Extinction Rebellion in the UK, school protestors in Europe. Secondly, the movements share a strong focus on environmental justice, economic reform, and the structural inequality that has been hard-wired into our economic system – which helps to explain their third shared characteristic: they’re hugely popular. Poll after poll has shown how the ideas behind the GND have resonated with the public.
Is nature being better valued and protected?

Without clean water, healthy soils, productive soils, pollination and all the many services nature provides, our economies and our societies cannot function. For our economies to restore nature we would expect to see a radical shift from "linear" economic models towards "circular" systems of consumption and production; robust environmental budgets and quotas; and a significant shift in ensuring nature is visible in all economic decisions.

Key points

- Circularity, eco-efficiency and net-zero targets have taken off, but these efforts alone will not be enough to protect nature.
- Natural capital approaches are increasing but mainstream economic models which shape public policy and private investment still fail to account for nature.
- Most countries spend on average less than 0.94% of their GDP on protecting biodiversity.
What we now know about the state of our planet

Our ecosystems are more sensitive to climate change than had been previously understood: The IPCC’s Special Report: Global warming of 1.5°C, which was released in October 2018, confirms that the planet is already experiencing the consequences of 1°C of global warming through more extreme weather, rising sea levels and diminishing Arctic sea ice, among other changes. Produced by 90 authors and reviewers from 40 countries, the report warns that: “Every extra bit of warming matters, especially since warming of 1.5°C or higher increases the risk associated with long-lasting or irreversible changes, such as the loss of some ecosystems”. For instance, by 2100, global sea level rise would be 10 cm lower with global warming of 1.5°C compared with 2°C. Coral reefs will decline by 70-90% with global warming of 1.5°C, whereas virtually all (> 99 percent) coral reefs will be lost with a 2°C increase. The authors conclude that limiting global warming to 1.5°C would require “rapid and far-reaching” transitions in land, energy, industry, buildings, transport and cities.

Nature is in crisis: In April 2019, the IPBES published the definitive global assessment of the state of nature, ecosystems and nature’s contributions to people – the first such report since the landmark Millennium Ecosystem Assessment was published in 2005. This year’s report revealed that one million species now face extinction within decades, with a rate of destruction tens to hundreds of times higher than the average rate of destruction over the past 10 million years. Soils are being degraded as never before, which has reduced the productivity of 23% of the land surface of the planet. Plastic pollution has increased ten-fold since 1980, with 300-400 million tonnes of heavy metals, solvents, toxic sludge and other wastes dumped into the waters of the world. The report concludes that nature is declining globally at rates unprecedented in human history “with grave impacts on people around the world now likely”.

“The IPBES report has marked a profoundly alarming moment in human history”

Andrew Norton, International Institute for Environment and Development (IIED).

Extinctions since 1500

Source: IPBES
Europe takes a lead on the circular economy: In recognition of the value of nature as a finite resource, the concept of a “circular economy” has in the past 10 years gone from an academic discussion to a practical business application. Rejecting linear economic models – whereby resources are extracted, used and discarded – the circular economy approach seeks to close the loop in industrial cycles. Practices include “cradle to cradle” approaches, in which waste materials are reprocessed into new resources (see example on Walt Disney Resort); extending the life of a product through re-manufacturing or repairing it; and using sharing platforms that allow people to rent out assets such as cars and houses to others (for example, RelayRides or AirBnB).

The EU Commission has taken the lead in promoting the circular economy since 2014. Its recent Circular Economy Package includes a strategy for plastics, waste and product legislation. Finland, France, the Netherlands, and Slovenia have all developed circular economy roadmaps, while Italy, Germany and the Netherlands have developed specific measures to incentivise circular business models. National policy interventions include investment in innovation; fiscal incentives to encourage reuse; and strengthening collaboration in supply chains.

Businesses also appear to be embracing circularity. In a new survey of 300 executives, 62% of American companies now plan to move towards circularity. Prominent examples include Phillips, which now rents out lighting systems as a service to clients rather than selling them. This provides the company with an incentive to ensure their lighting systems are reusable in the future. Retail giants like H&M, Levis and Patagonia are using circular models to recycle and reuse old garments for new clothes, and IKEA have vowed to be completely circular by 2030.

EXAMPLE: Walt Disney World Resort sends food waste – including grease, cooking oils and table scraps – from select restaurants in its complex to a nearby 5.4 MW anaerobic digestion facility owned and operated by Harvest Power. The organic waste is converted into renewable biogas (a combination of carbon dioxide and methane) to generate electricity, with the remaining solid material processed into fertilizer. The energy generated helps to power Central Florida, including Walt Disney Resort’s hotels and theme parks.
Companies are setting science-based targets: It is clear that businesses must set carbon targets based on science and not solely on what they can afford or achieve. Since the start of 2018, more than 130 new corporates have committed to setting science-based emissions reduction targets, a 39% increase from the previous year. Nearly a fifth (17%) of Fortune Global 500 companies have done the same, with India’s Dalmia Cement becoming the latest company from a heavy emitting sector to join their ranks. Critics fear that we are losing precious time as companies spend time working out what their contribution should be – rather than accepting that their ambition must be to become net zero, carbon positive or regenerative. Most importantly, many of the larger industrial players, such as fossil-fuel companies or aviation companies, whose action is vital to this transition, are not part of the movement.

The goal for "no net loss" in biodiversity is starting to inform mainstream policy and business targets. For example, the UK’s Chancellor of the Exchequer has pledged to introduce clauses to the upcoming Environment Bill, which will require all developers to generate biodiversity net-gain through all projects in the UK and overseas territories. However, researchers note that "no net loss" when used without an explicit frame of reference and quantified counterfactual scenario (in effect, a scenario showing no net loss compared to what), is meaningless, and potentially misleading. Despite these efforts, funding for biodiversity remains woefully low. At present countries spend on average less than 0.94% of their GDP on protecting biodiversity. Yet up to 50% of their economy depends on it.
To hit mid-century global decarbonisation targets, global energy intensity would need to decline by between 4 and 10% a year. **Currently, it is declining at around 0.4% a year.**

**Circularity and efficiency alone are not enough:** Despite governments and businesses taking positive steps towards embracing circular economy principles, the quality and impact of their policies are somewhat patchy. According to an analysis of 32 countries, the policy and legislative infrastructure for supporting the circular economy is focused on waste management, "with only a few examples going beyond increasing recycling rates and a higher use of secondary raw materials".

Only 9% of the global economy is circular – meaning that just 9% of the 92.8 billion tonnes of minerals, fossil fuels, metals and biomass that enter the economy are re-used annually.

The underlying economic conditions are still biased towards extraction.

To hit mid-century global decarbonisation targets, global energy intensity (a measure of the energy inefficiency of an economy) would need to decline by between 4 and 10% a year. Currently, it is declining at around 0.4% a year. The world would need to accelerate energy efficiency by 10 times its current intensity to stay within planetary limits.

Critics of resource efficiency and green growth argue that there is little evidence to show that economic growth can be separated from increased use of resources and its impact on the environment decoupled.
When it comes to any aspect of the economy – from materials, energy, water, greenhouse gases, land, water pollutants, and biodiversity loss – decoupling is either only relative, temporary or local.

“In most cases, decoupling is relative. When absolute decoupling occurs, it is observed only during rather short periods of time, concerning only certain resources or forms of impact, for specific locations, and with very small rates of mitigation,” the Decoupling Debunked report said.

Global climate emergency protests spread

In the summer of 2018, Swedish schoolgirl Greta Thunberg went on strike from school and sat on the steps of Parliament in Stockholm, demanding tougher policies to reduce greenhouse gas emissions. Since then, her actions have rippled throughout the world, inspiring thousands of students to strike in solidarity with her as part of the #FridaysForFuture campaign. In September 2019 school strikes took place in 4,500 locations in 150 countries. The are set to continue. Thunberg has addressed EU leaders, the French parliament, the UK parliament and world elites at Davos.

Simultaneously, Extinction Rebellion – XR for short – made headlines by bringing London to a standstill for more than a week. Thousands of protesters from the grassroots movement, which was founded in the UK and is calling on governments to “Tell the truth” about the scale of climate change, occupied traffic points across the city, resulting in more than 1,000 arrests. XR now has affiliates in more than 50 countries, and there are smaller protests being held nearly every day. Thanks to the “Greta effect” and XR, 740 jurisdictions and local governments have declared a climate emergency around the world, as well as the parliaments of the UK, Portugal and Canada.

The Green wave is growing. In the latest European elections, the Green parties increased their number of seats in the European Parliament from 52 to 67. In Germany, they came second, in the UK, they beat both Labour and the Conservatives, and France, they went from being virtually non-existent to being the third-largest party. Ireland and Finland also saw huge gains for the Greens.
Countries are starting to account for wealth in new ways: A growing number of countries are working with the World Bank Partnership to produce national natural capital accounts, which are helping to expose the real basis of their economic systems. For example, having developed natural capital accounts, the Indonesian government has scaled up their support to protecting their natural resources, while in Costa Rica, forest, water and land accounts are maintained by the central bank and have led to an increase in forest cover. Last year, governments and institutions came together to develop a shared narrative on how and why natural capital generates multiple returns – for society and the economy, as well as for the environment. Over 50 different case studies and examples provide a casebook of evidence for how natural capital approaches are working.

Our partners in Uganda, ACODE, are seeing localised benefits of natural capital-based approaches. For example, a major watershed around the River Rwizi, has come under pressure from climate change, poor agriculture practices, population pressure and unsustainable activities. This has led to the deterioration both in quantity and quality of the water, ultimately leading to water shortages and water rationing in the surrounding Mbarara district. Prompted by a natural capital-based approach, a new public private partnership between the government, development agencies, civil society organisations and Coca Cola has emerged to tackle sustainable water use and management for the River Rwizi.

EXAMPLE: The UK pioneers natural capital methods

In 2011, the UK government published the White Paper, The Natural Choice, committing "to be the first generation to leave the natural environment of England in a better state than it inherited". It established the Natural Capital Committee (NCC) to advise on how best to achieve this. The Committee reports to the Cabinet and advises the Government on when, where and how natural assets are being used unsustainably. One of their achievements has been to update the UK Treasury’s Green Book, the core guidance for all public policy making with the principles of natural capital methodologies and approaches.

Businesses are also starting to engage with the natural capital agenda. In 2016, the Capitals Coalition, which brings together nearly 300 organisations, particularly from the private sector, launched the Natural Capital Protocol to enable businesses to map their dependency on natural capital in their operations and supply chains. For example, Kering, owner of luxury brands such as Gucci and the sports brand Puma, has used the Protocol to guide the production of their Environmental Profit and Loss Account in order to understand their impacts and dependencies on natural capital assets, and where these are, to make better decisions.

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4 Supported by the Green Economy Coalition, Capitals Coalition, and World Bank
5 Formerly the Natural Capital Coalition
"I would give the transition towards better valuing our natural systems a score 4 – there is action and momentum in the right direction but it remains far too slow. You wouldn’t run a company without a balance sheet. You shouldn’t run a country without a balance sheet either. Unless you have valued nature and natural resources on the balance sheet, you are flying blind, leaving off an asset worth up to nearly 50% of the wealth of the nation."

Cameron Hepburn, Oxford Martin School, Economist

However, nature is still valued at close to zero in most economic models and decisions: Most economic tools and methodologies used by governments, investors and financiers, make little reference to the environment and fail to account for the role that ecosystem services play longer term. In most investment and public policy decisions, natural capital is valued at close to zero. Alternative methodologies, including multi-criteria analysis or deliberative models, are still not the mainstream when it comes to making decisions.

Current spending on environmental protection is woefully low. In most countries, less than 2% of the national budget goes towards restoring the environment – yet it accounts for up to 50% of an economy. Topping the list of OECD countries that spent the most on environmental protection were the Netherlands (3.2%), Japan (2.9%) and Australia (2.4%). The UK devoted 1.8% of its total budget to environmental protection, while the two Latin American countries on the list, Colombia and Costa Rica, both spent 1.4%. Non-OECD countries tend to invest a lot less, for example South Africa invests 0.7% of the national budget on protecting nature.

Of their environmental spending, countries spend a tiny proportion on biodiversity. In Europe, countries spend on average 0.2% of their GDP on biodiversity, while in many developing countries the UN BIOFIN initiative suggests it ranges from 0.3 – 0.94% of their GDP.

EXAMPLE: Great Green Wall: green infrastructure at scale?

The Great Green Wall is an African-led movement with an ambition to plant trees across the entire width of Africa and produce an 8,000km natural wonder of the world. By 2030, the Wall aims to restore 100 million hectares of currently degraded land, sequester 250 million tonnes of carbon and create 10 million jobs in rural areas. As of March 2019, 15% of the wall was complete; in Senegal, over 11 million trees have been planted. Nigeria has restored 12 million acres of degraded land and Ethiopia has reclaimed 37 million acres.
People are feeling more divided than ever before. The world over, gaps are emerging between rich and poor, between young and old, between governments and their citizens. At the end of 2019, 28% of the world’s population was living in countries run by populist leaders.

From this sense of fragmentation and discord, a new economic order must emerge – one that prioritises peoples wellbeing, roots decisions in local contexts, supports small enterprises to grow and flourish.

**For government:**

1. **Declare an emergency.** The impact of environmental failure will dwarf all financial crises we have seen to date. Ministries of finance and economic decision-makers must step into the green economic reform space and lead partner with social and environmental departments as a top government priority.

2. **Engage in social dialogue:** The communities feeling left behind by our current economic model can lead the vision for a better economic system. Processes for "Green New Deals" or France’s "Great National Debate" are proving highly effective for re-engaging electorates. Learning from South Africa’s Green Economy Accord, the outcomes need to be clearly linked into national policy making processes.

3. **Prioritise a just transition.** Ensure meaningful participation of stakeholders in policymaking. Governments can learn from the many examples of a just transition including conditional social transfers and payment for ecosystem services, provision of universal basic income and services or a living wage, community utility ownership and social enterprise models, supporting reskilling and retraining.

4. **Target industrial policy and green jobs.** As a matter of urgency, governments need to prioritise investment in green infrastructure, energy efficient buildings and waste reduction. Enabling conditions for small enterprises must be prioritised.

5. **Identify and penalise "brown" investment and business behaviours.** Public policy makers should be working with their central banks to blacklist high-carbon bonds and investments. They should also be using central banks’ own capital for de-risking green and social investments.

6. **Account for natural and social capital.** National progress should move beyond GDP to account for wellbeing and the state of our natural world. Models in New Zealand, Scotland and Iceland can all provide inspiration. Similarly, economic modelling and assessments, ranging from cost-benefit tools and investment analysis, must account for natural and social capital.
For business:

1. **Declare an emergency.** No business, big or small, will be left untouched by environmental decline and as such, this is a material risk and opportunity for businesses that needs to be tackled at the level of the Board.

2. **Proactively engage with national green economic policy development.** From carbon pricing and certification schemes, to tax regimes and capitals accounting, these are all issues for which businesses can push for a progressive policy regime that can start to rewire our economies. Companies can become vocal advocates and agents for ecological restoration and societal wellbeing.

3. **Pioneer integrated reporting.** As a matter of urgency, companies should replace quarterly financial reports with annual integrated reports. These will account for progress on social and natural capital as well as financial capital, and provide the key statement of a company’s progress for shareholders and stakeholders alike.

4. **Develop net-positive targets.** Companies must set ambitious "net-positive" targets that improve biodiversity and wellbeing, and reduce their carbon emissions in absolute terms, within their operational and supply-chain emissions.

5. **Pay their fair share.** Public opinion has shifted against those companies that are avoiding their fair share of taxation. Businesses should be supporting the reform of our global tax regimes.

6. **Embark on social dialogue with employees and stakeholders.** Ensure that employees are represented on the Board and support progressive living wage policies and end gender pay discrimination.

For civil society:

1. **Join the call for global economic transformation.** Our economies are not set in stone – they can be structured, designed and governed differently. CSOs play a critical role in not only raising the ambition of governments and businesses but persuading the public that a transition to a different economy is possible as well as necessary and desirable.

2. **Inclusion is the driver of the green transition:** An inclusive and just transition is not a nice to have – it is the driver of a transition that can go to scale. All campaigns and advocacy must root the transformation in the needs of people and their communities.

3. **Move the debate beyond energy and carbon:** While the world’s attention is on carbon emissions, the rest of nature is dying. CSOs must work to raise the profile of biodiversity and our ecosystems in the eyes of decision makers as well as the public.

4. **Demand social dialogue at all levels of policy:** All efforts must be concentrated on ensuring the voices of the poorest people and marginalised communities are represented in economic policy decisions, frameworks and approaches.

5. **Join the dots in public narrative.** Help mainstream commentators and influencers understand the connections between different agenda items – poverty reduction, gender equality, workers rights, environmental protection (etc.) – all of which are symptoms of how we organise and structure our economies.

6. **Collaborate.** The next phase of the transition to greener fairer economic systems will meet more resistance. CSOs must work with each other – not solely on individual campaigns or projects – but as institutional and strategic levels.
Glossary

**Agroecology:** Agroecology is an integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of food and agricultural systems. It seeks to optimise the interactions between plants, animals, humans and the environment while taking into consideration the social aspects that need to be addressed for a sustainable and fair food system. In this way it is distinct from organic agriculture which tends to focus on production techniques. (UN-FAO)

**Circular economy:** Looking beyond the current take-make-waste extractive industrial model, a circular economy aims to redefine growth, focusing on positive society-wide benefits. It entails gradually decoupling economic activity from the consumption of finite resources, and designing waste out of the system. For more information: [www.ellenmacarthurfoundation.org](http://www.ellenmacarthurfoundation.org)

**Green Economy:** For the Green Economy Coalition, a green economy is a system that supports prosperity for everyone within the ecological limits of the planet. For us it is one in which natural systems – biodiversity, water systems, soils, forests etc. – and people can thrive. It is also one that redistributes natural, physical and financial wealth, thereby closing the inequality gap between the rich and poor. As such for us an "inclusive green economy" is not just one that brings diverse voices into the policy making process, rather it also brings more equitable outcomes.

**Green bonds:** The term "green bond" refers to debt securities whose proceeds are used to finance investment projects with an environmental benefit. For more information: [https://www.climatebonds.net/](https://www.climatebonds.net/)

"**Extreme fossil fuels**": A term that is used by the organisation Bank Track to mean oil (tar sands, Arctic, and ultra-deepwater oil), liquefied natural gas (LNG) export, coal mining, and coal power. [https://www.banktrack.org](https://www.banktrack.org)

**Fossil fuel subsidy:** Generally understood as any government action that lowers the cost of fossil fuel energy production, raises the price received by energy producers, or lowers the price paid by energy consumers. However, there is no internationally agreed definition, prompting different conclusions. For more information: [https://www.carbonbrief.org/explainer-the-challenge-of-defining-fossil-fuel-subsidies](https://www.carbonbrief.org/explainer-the-challenge-of-defining-fossil-fuel-subsidies)

**Natural capital:** Natural capital is the stock of renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) that yield a flow of benefits to people. The broad range of services provided by natural capital includes food, water, energy, shelter, medicine, and the raw materials we use in the creation of products. It also provides less obvious services such as clean air, flood defence, climate regulation, pollination and recreation. Ecosystem services are the multiple benefits we derive from well-functioning ecosystems and describe our critical dependence on nature for our basic needs, wellbeing and prosperity that natural ecosystems create.

**Organic agriculture:** Organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasises the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using, where possible, agronomic, biological, and mechanical methods, as opposed to using synthetic materials, to fulfil any specific function within the system. (UN FAO)
Science-based targets: Science-based targets are a set of goals developed by a business to provide it with a clear route to reduce greenhouse gas emissions. An emissions reduction target is defined as science-based if it is developed in line with the scale of reductions required to keep global warming below 2°C from pre-industrial levels. The Science Based Targets initiative was formed towards the end of 2015 through a joint partnership between CDP, the UN Global Compact (UNGC), the World Resources Institute (WRI) and WWF.

Social Bonds: A social impact bond, also known as pay-for-success financing, pay-for-success bond, social benefit bond or simply a social bond, is one form of outcomes-based contracting. Although there is no single agreed definition of social impact bonds, most definitions understand them as a partnership aimed at improving the social outcomes for a specific group of citizens.

Sustainable finance policy: The process of taking due account of environmental and social considerations when making investment decisions, leading to increased investment in longer-term and sustainable activities.

Systemic risk: Systemic refers to the risk of a breakdown of an entire system rather than simply the failure of individual parts. In a financial context, it captures the risk of a cascading failure in the financial sector, caused by interlinkages within the financial system.

Trickle-down economics: Trickle-down economics, or trickle-down theory, states that tax breaks and benefits for corporations and the wealthy will trickle down to everyone else. It argues for income and capital gains tax breaks or other financial benefits to large businesses, investors, and entrepreneurs to stimulate economic growth. The argument hinges on two assumptions: All members of society benefit from growth, and growth is most likely to come from those with the resources and skills to increase productive output.
The Green Economy Coalition exists to accelerate the global transition to greener, fairer economies. Together we:

**Connect:** We make bridges between business, civil society and government. We stimulate debate, dissent and dialogue. We build collective positions.

**Communicate:** We tell the stories of change. We track the transition. We bust economic myths.

**Influence:** We champion the voice of the excluded. We challenge the status quo. We hold decision makers to account.

The race for green and fair economies is on. Let's hold our governments to account:

[www.greeneconomytracker.org](http://www.greeneconomytracker.org)

Find out more at

[www.greeneconomycoalition.org](http://www.greeneconomycoalition.org)

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