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Post-COVID Climate and Sustainable Development Governance

2021 Beijing Forum – IR Sub-Forum 18th December 2021

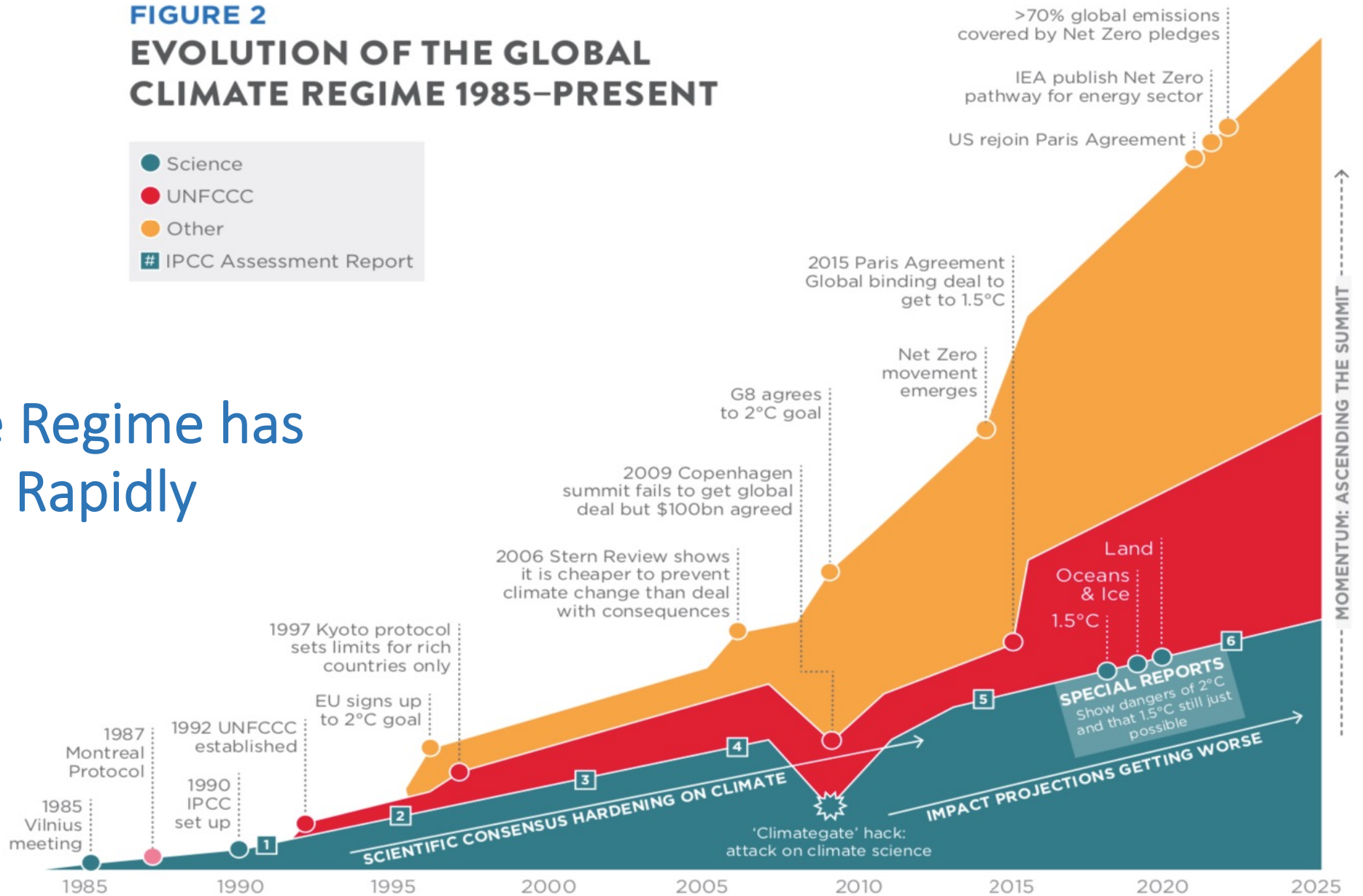
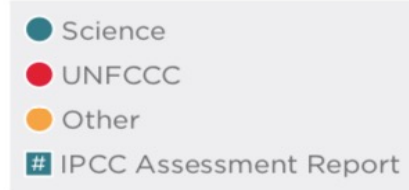
Nick Mabey, CEO & co-Founder, E3G

Five Takeaways

- 1. The UNFCCC has driven the most impactful environmental regime of all time** reducing projected 2100 temperatures from 4.4C in 1990 to 2.1-2.4C in 2021 after the Glasgow COP 26. However, evolving climate science is clear that this is not a safe level of risk to reliably avoid major economic, social and security disruptions to all countries.
- 2. The UNFCCC has mainly delivered change by creating political attention moments & aligning the pace and scale global economic change** not through formal compliance and legal constraints. It is unclear whether this approach is sufficient to reach the Paris 1.5C goal.
- 3. The UNFCCC has built and shaped a broad & deep international climate regime** through integration into other international institutions and innovation of networked governance approaches through creating plurilateral government and non-state actor alliances for climate action.
- 4. Aligning the global finance system with Paris outcomes is critical in 2022** to deliver a “green recovery” in emerging and developing economies and incorporate systemic risk & resilience support into the public and private financial decisions.
- 5. Climate regime is unprepared to managed critical risks in 2020s on delivery, trade, climate impacts and broader geopolitics.** Major powers are still reacting – and not shaping – the global governance needed for an orderly climate transition. Governments need to invest more in the diplomatic and analytical capability needed to build a resilient & effective climate regime.

This talk is based on a research paper by E3G, UN Foundation and Climate Analytics written as an input to UN Secretary General’s “Our Common Agenda” report <https://unfoundation.org/our-%20common-agenda/climate-report/>

FIGURE 2
EVOLUTION OF THE GLOBAL
CLIMATE REGIME 1985–PRESENT



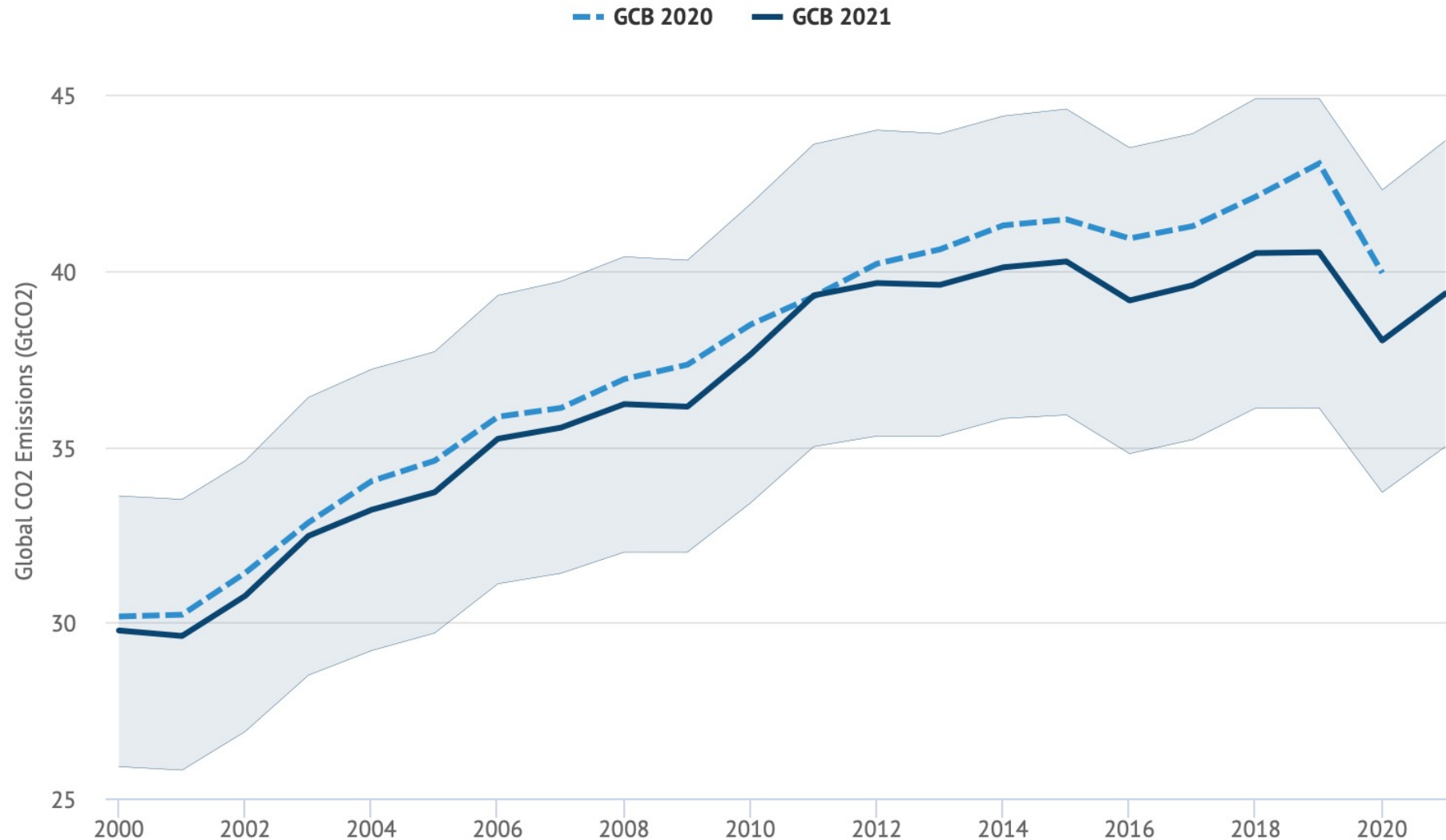
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The Climate Regime has Grown Very Rapidly

Global Net Carbon Emissions have Stabilised



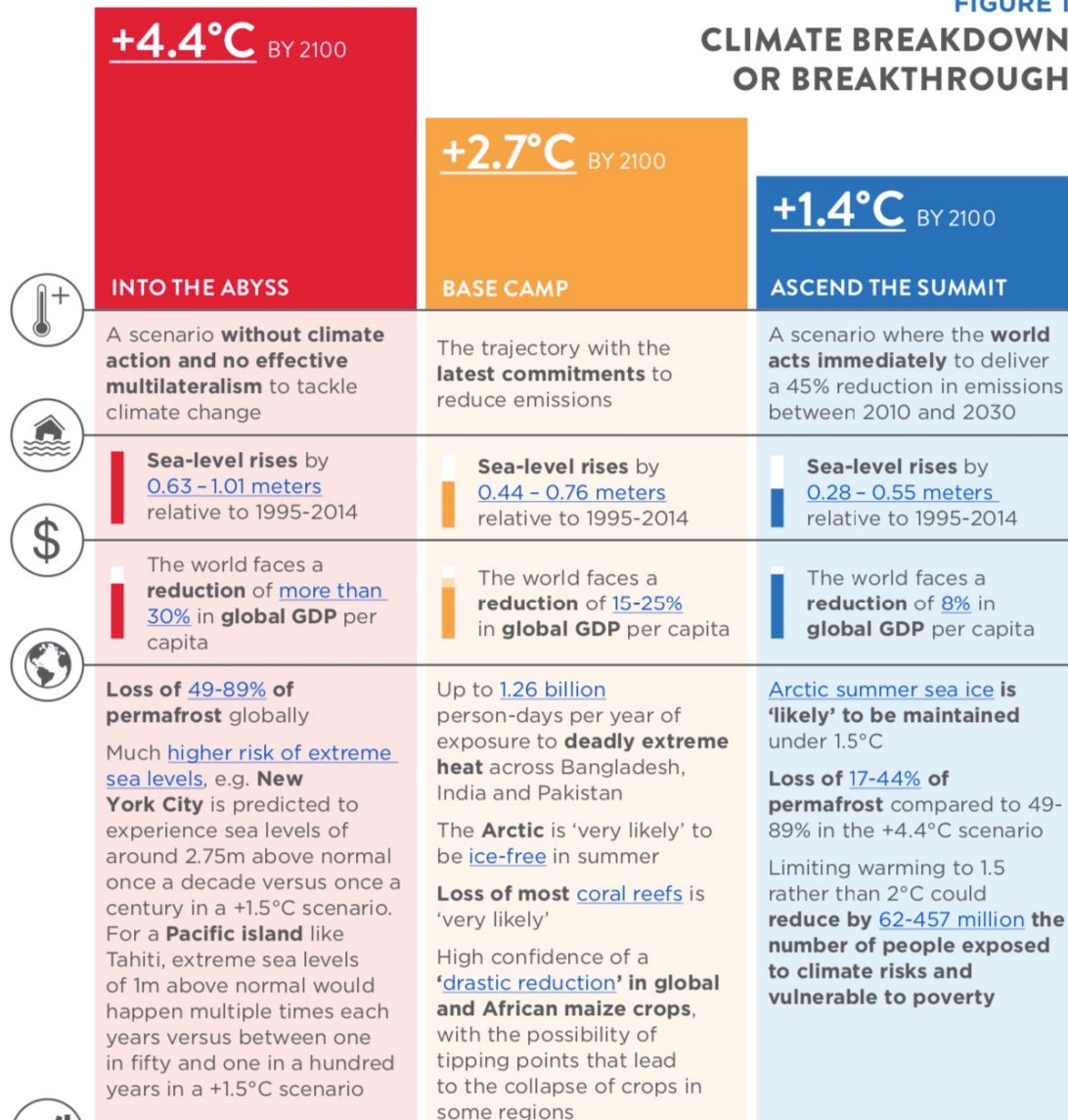
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Source: Global Carbon Project 2021 via Carbon Brief

UNFCCC is working but not fast enough

**FIGURE 1
CLIMATE BREAKDOWN
OR BREAKTHROUGH**



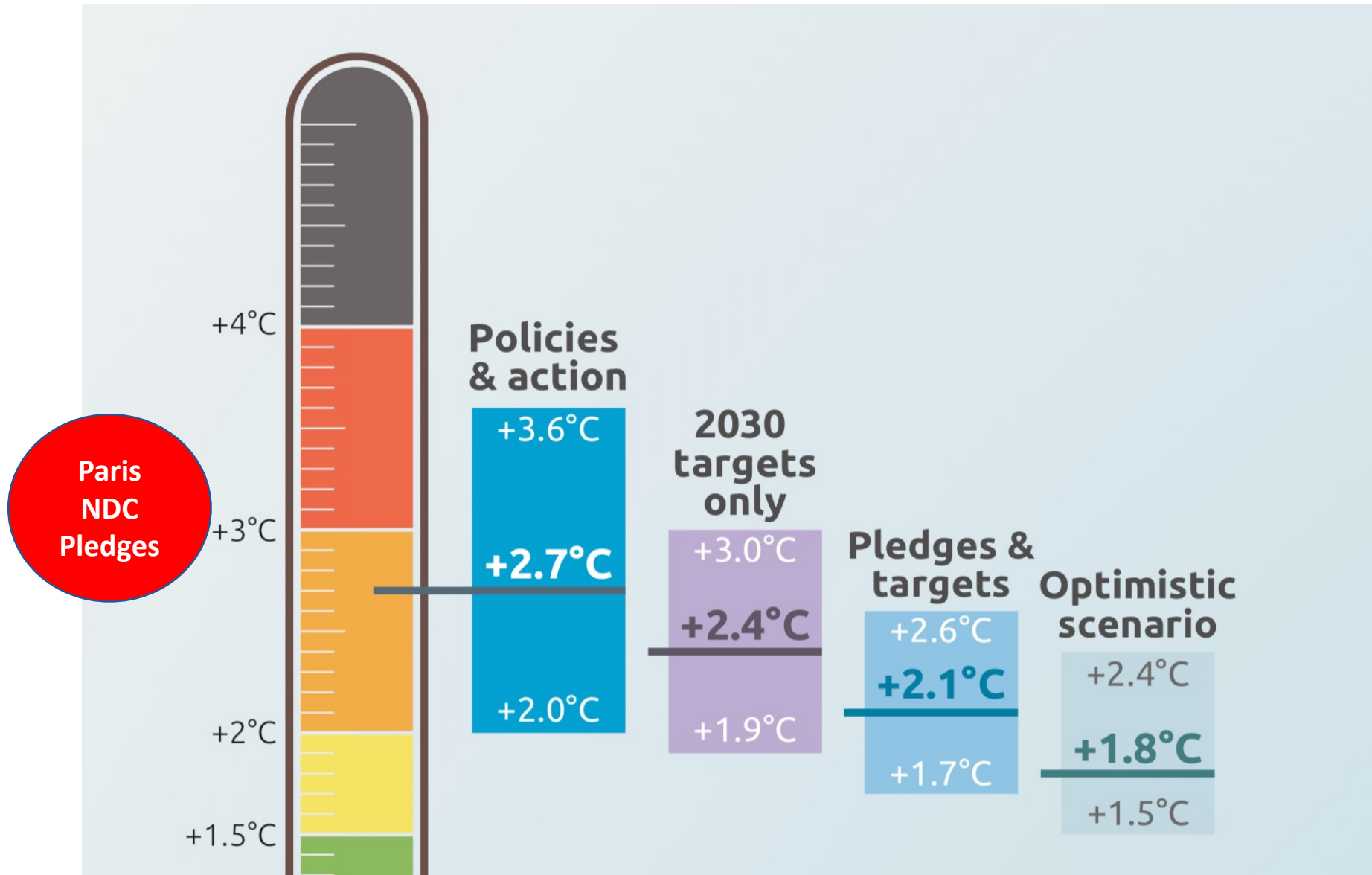
- **1990:** Without any climate action since 1990 projected 2100 temperatures would be 4.4C (3.3-5.7C).
- **2015:** Country NDCs in Paris in 2015 moved BAU outcome range to 2.7C-3.5C by 2100.
- **Dec 2021:** COP 26 in Glasgow saw new 2030 commitments who's full delivery would limit to 2.2-2.4C by 2100.

Compared to other regimes (trade, arms control etc) climate has been a success, but scientific risks have been increasing.

Glasgow opened the door to “keeping 1.5C alive”



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2022?: 90% of the global economy is covered by a net zero target

Glasgow commitments to increase NDCs in 2022 aligned with net zero goals would deliver in 1.8C by 2100.

Climate Sensitivity & Impacts are Higher than Expected



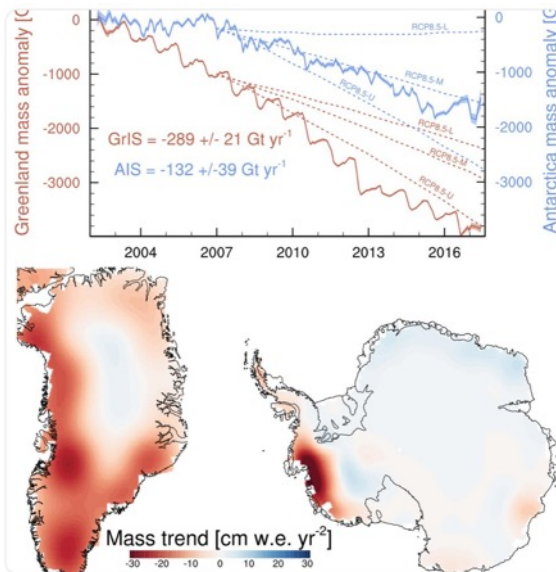
- Critical impacts in terms of Arctic and Antarctic melting, heat extremes, tropical storms, ocean warming & biodiversity impact happening at lower average temperatures than expected
- “Unexpected” regional weather extremes (eg heat dome) are driving earlier major impacts.
- Higher than expected methane emissions point to underestimation of climate forcing
- Some evidence that global CO2 sinks are weakening which would accelerate warming trends



Greenland is covered with a vast amount of ice—but for how long?
PHOTOGRAPH BY MICHAEL MELFORD, NAT GEO IMAGE COLLECTION

ENVIRONMENT

Greenland’s ice is melting four times faster than thought—what it means



Environment

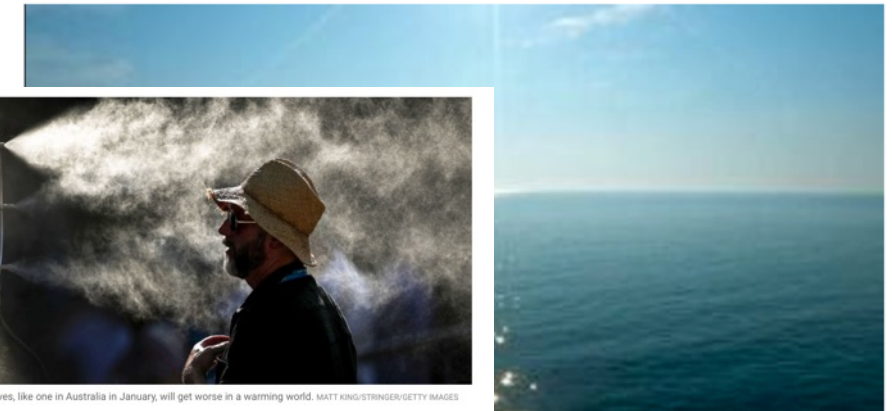
Worst-case global warming predictions are the most accurate, say climate experts

‘There is a 93 per cent chance that global warming will exceed 4C by the end of this century,’ lead scientist says
Josh Gabbatiss Science Correspondent | @josh_gabbatiss |
Wednesday 6 December 2017 19:00 | 134 comments



World Entering 'New Climate Regime' of Extreme Heat Waves Caused by Human-Induced Climate Change

By Pam Wright · 3 days ago · weather.com



Heat waves, like one in Australia in January, will get worse in a warming world. MATT KING/STRINGER/GETTY IMAGES

New climate models predict a warming surge

By Paul Voosen | Apr. 16, 2019, 3:55 PM

World’s largest ice shelf melting 10 times faster than expected as waters heat up

Research reveals growing impact of solar heating of Antarctic Ocean

Harry Cockburn | Monday 29 April 2019 15:30 | 18 comments



UNFCCC consensus on “avoiding dangerous climate change” has shifted from above 2C to “well below 2C/1.5C”

Even 2C>> requires massive structural change. Coal retirement key for 1.5C.



“Limiting warming to 1.5°C is possible within the laws of chemistry and physics but would require unprecedented transitions in all aspects of society” Foreword, IPCC Special Report on Global Warming of 1.5°C

- **All G20 countries (except India) have to peak emissions in 2020s to reach 50% chance of 1.5C.** All G20 countries (except India & Indonesia) need to peak before 2030 to deliver well below 2C.
- **All G20 countries (except India) must be at net zero or below by 2050 to meet 1.5C** but not for well below 2C.
- **No new fossil infrastructure can be built to reach 1.5C** – unless existing plants are retired early or run much less
- **Chinese power and industry is over half of committed emissions in infrastructure.** China will need to strand many existing assets if 1.5C is to remain within reach globally.
- Fossil fuel producing nations - especially smaller & high-cost producers - need to **implement rapid economic diversification programmes** or face significant reductions in GDP as prices & demand falls & low-cost producers dominate markets.

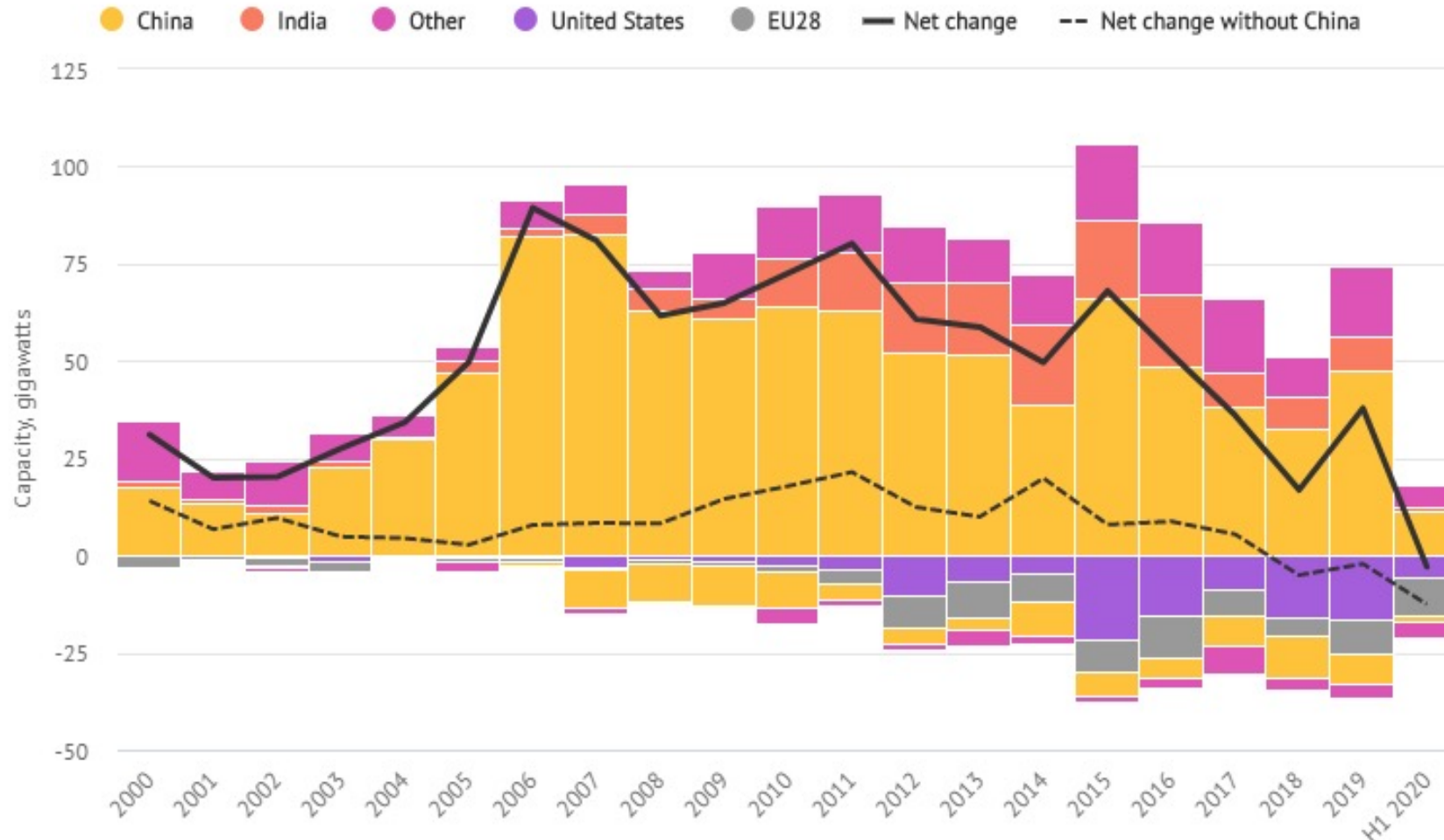
Glasgow was a major step to “making coal history”



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Global coal capacity has been in decline since 2018, outside China

H1 2020 marked the first global fall in coal capacity on record



Before Glasgow there had been a **76%** reduction in proposed coal power since Paris in 2015. This is equivalent to China’s whole coal fleet.

All G20 countries agreed in 2021 to stop financing international coal power

Most major coal pipeline countries agreed to stop or pause new coal power generation

Historic inclusion in Glasgow Pact of need to accelerate “phase down unabated coal power”

UNFCCC has delivered by shaping economic change not forcing country compliance



- UNFCCC & Paris Agreement contain legally binding obligations but do not have strong compliance mechanisms or sanctions.
- UNFCCC has acted as the “keystone” in the international economic and political regime – shaping political understanding consensus on “acceptable” climate risks and driving rapid economic change:
 - **Kyoto Protocol 1997**: resulted in a rapid rise in clean technology patents
 - **Copenhagen Accord 2009**: shaped rapid growth in global renewable energy investment driven by EU policy and supported by Chinese manufacturing
 - **Paris Agreement 2015**: was supported by rapid reductions in renewable energy costs, stimulated integration of climate risk into private & public finance and drove rapid growth in EV markets.
 - **Glasgow Pact 2021**: saw plurilateral agreements to stop global deforestation, reduce global methane emissions and reduce public international fossil financing by \$24bn per annum.

Focus is shifting from target setting to implementation; is the UNFCCC fit for purpose?

UNFCCC has driven Integration and Innovation across the International System



- **Integration of Climate Goals & Risks into International Institutions**

- First **UN Security Council** climate debate in 2007 – UN Climate Security Mechanism established 2018
- **G20 Financial Stability Board** climate risk task force & working group 2015
- **Multilateral Development Bank** Paris Alignment pledge 2015–alignment framework announced 2021
- **IEA** aligning World Energy Outlook with Paris Goals 2021
- **IMF** commitment to integrate climate risk into economic surveillance 2020. Post-COVID focus on improving economic resilience will raise the profile of climate impacts across economic institutions.

- **Innovation in the Climate Regime**

- **Powering Past Coal Alliance** founded 2017 has 48 national government members committed to rapid coal phase out & mutual learning and support in just transitions
- **Finance in Common Summit** 2020 pledge by all domestic public banks globally - delivering \$2 trillion in investment - to align with Paris and SDG goals
- **South Africa Just Economic Transition – JET** agreement launched in COP 26 with four donors committing \$8.5bn to support national plan to phase down coal power use & manage social impacts
- **GFANZ** – COP 26 commitment by private asset owners and managers controlling \$120 trillion in assets to align with 1.5C consistent trajectories. UNSG expert task force established to develop common standards

Three critical areas for global climate governance in 2022/23



- 1. Delivering the Glasgow Climate Pact “Ambition Accelerator”:** COP 26 NDC commitments were far away from a global 1.5C trajectory. Countries agreed to return in 2022 with plans to increase and implement their 2030 NDCs. If little progress is seen in bridging the gap to 1.5C the UNFCCC could face a crisis of vulnerable country and public confidence at COP 27.
- 2. Increasing Green Recovery and Infrastructure Finance:** clean investment must increase by 400% per annum in the 2020’s to meet the Paris Goals. The COVID crisis means that investment is currently falling in most emerging economies. The B3W (US), CGI (UK), EU Global Gateway and “green BRI” hold out prospect of a large scale up in infrastructure finance availability but this must become **concrete in 2022 to give countries the confidence to increase their 2030 NDCs.**
- 3. Adaptation, Loss and Damage:** rising climate damage is undermining and even reversing development in many countries. COP 26 committed OECD countries to double adaptation finance and begin a dialogue on loss and damage responses. COP 27 aims to agree an operational global adaptation goal. The IMF will define a new “loss and damage” RST fund in 2022 - major funding and open access critical to making this successful. **Lack of progress in this area could result in high confrontational negotiations at COP 27.**

Climate Regime must be resilient to the Politics of the Clean Economy Transition

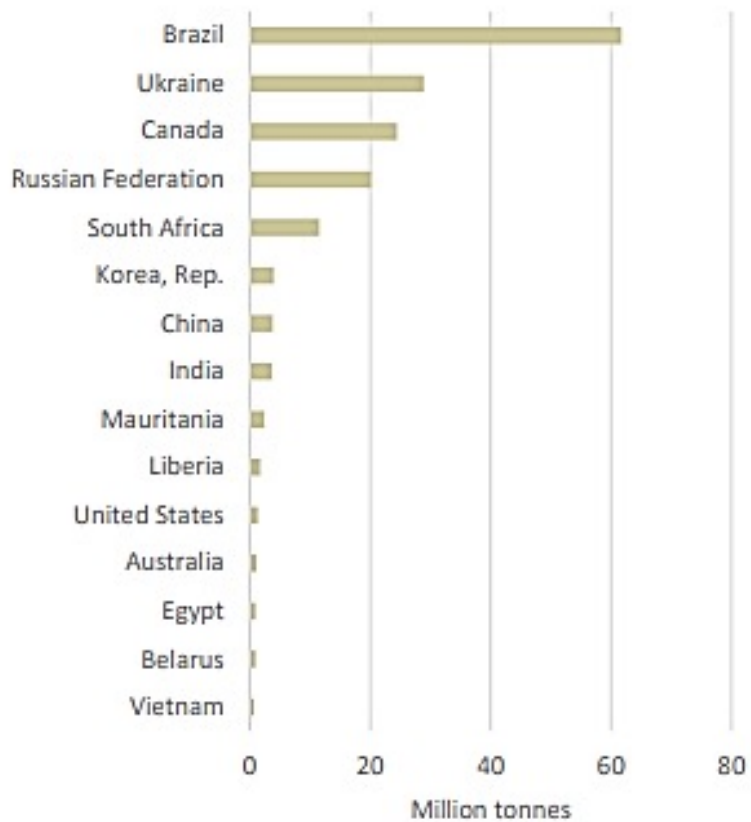


- Competition for clean economy markets has been growing since Copenhagen with Chinese 5 year plans prioritising green sectors for growth often fuelled by EU (subsidised) demand
- Under Biden clean economy regulation has converged with other post-COVID concerns on dependence on Chinese supply chains
- Key areas of possible tension in the early 2020s will be:
 - **Financial Rules:** with trans-Atlantic and G20 debates over the role and alignment of green taxonomies and move to mandatory disclosure.
 - **Gas/Methane/Hydrogen:** strong disagreement across countries on the the role for gas in the transition are being played out in MDB/DFI standards and the EU's proposed rules on methane standards. The race to define standards and build capacity for green hydrogen has been a key focus of recovery packages in US, China, EU and Japan.
 - **Electric Vehicles:** 25% of global car market is already committed to ICE phaseout by 2035. EU & US recovery and EV policy heavily focused on building domestic supply chains – especially on batteries – way from China and SE Asia and securing resilient materials supply.
 - **Trade/CBAMs:** EU delay in CBAM implementation reduced international push back from US & China to proposals but still many questions to ask. Outside EU neighbourhood trade impacts will be driven by other policies like the battery and methane regulations.

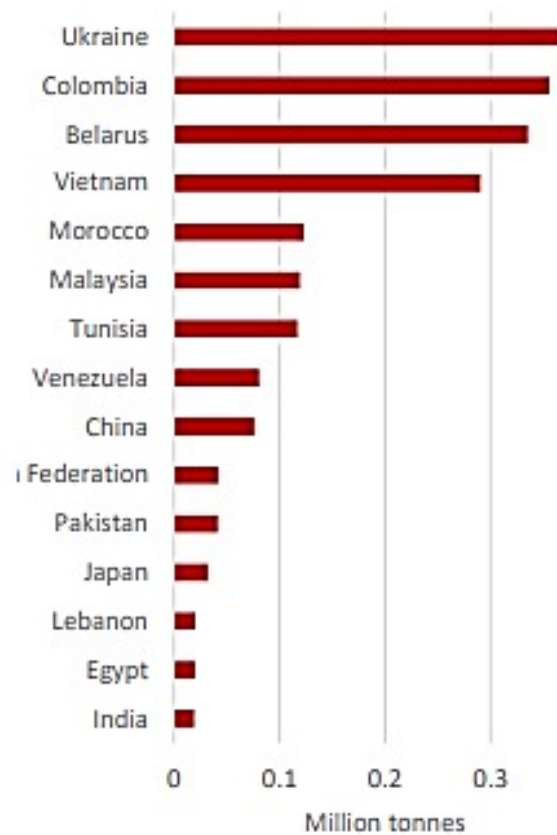
Recovery packages in US, EU & China are all designed to build domestic manufacturing and competitiveness – unclear whether this will impact support for open trade and supply chains or lead to trade disputes.

EU Carbon Border Adjustment Mechanisms doesn't affect major economies; inclusion of gas changes the politics

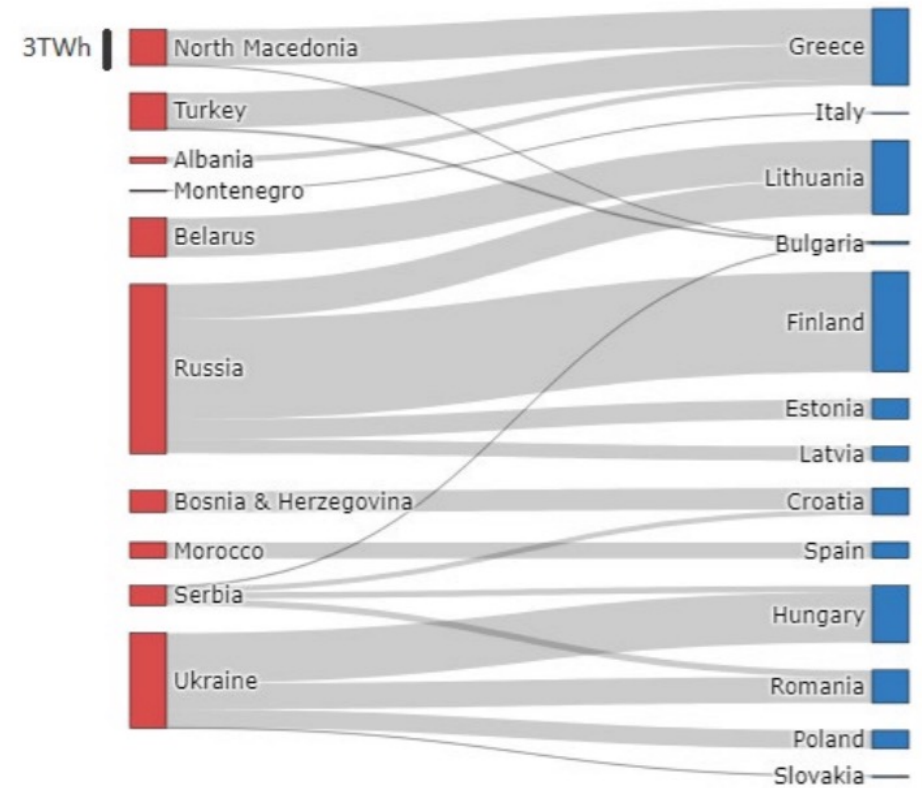
Iron and Steel



Cement



EU ETS gross electricity imports (TWh) in 2019



Top 15 steel and cement exporters to the EU in 2018 Source: E3G analysis of resource.earth (2018 data)

Gross imports into EU ETS countries in 2019, by origin (left) and destination (right). The thickness of lines is proportional to the volume of electricity in TWh. Note: Imports from Russia to Lithuania all originate from the Kaliningrad enclave.

Ember 2020