



THE TIME IS NOW – THE FINANCIAL IMPACT OF THE ENERGY TRANSITION

Kingsmill Bond, Energy Strategist, Carbon Tracker

Mark Campanale, Founder & Executive Chairman, Carbon Tracker

Webinar

Monday, 29 March 2021, 10:00 BST

A Word From Today's Chairman



Professor Michael Mainelli

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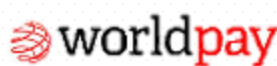


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Today's Agenda



- 10:00 – 10:05 Chairman's Introduction
- 10:05 – 10:25 Keynote Address – Kingsmill Bond & Mark Campanale
- 10:25 – 10:45 Questions & Answers

Today's Speaker



Mark Campanale

Founder & Executive Chairman

Carbon Tracker



Kingsmill Bond

Energy Strategist

Carbon Tracker

The time is now – the financial impact of the energy transition

Presentation to FS Club

Kingsmill Bond, March 2021

WHO WE ARE

Identity

Carbon Tracker is an independent non profit financial think tank funded by EU and US foundations interested in climate.

Vision

To enable a climate secure global energy market by aligning the capital markets with climate reality.

Mission

Mapping the transition for the fossil fuel industry to stay within a two degree budget.

Strategy

Empower **investors** to identify and switch off capital to the highest cost, highest carbon projects.



Engage with **companies** to re-assess both the viability of such projects and of their business model.



Educate mainstream **financial markets** and **policy-makers** over the risk of a disorderly transition.

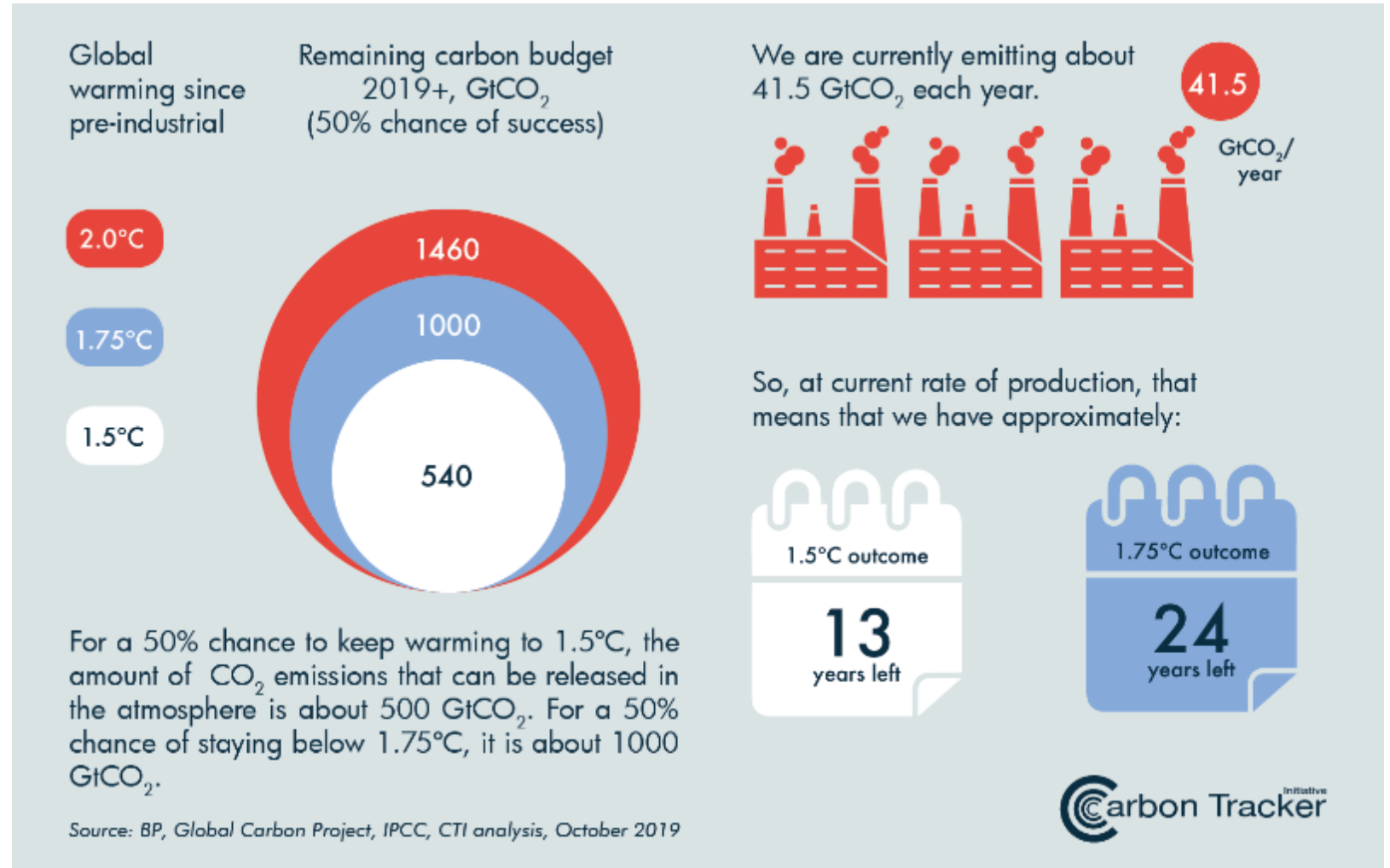


Work with **financial regulators** to bring transparency on carbon and stranded asset risk and the fossil fuel risk premium.

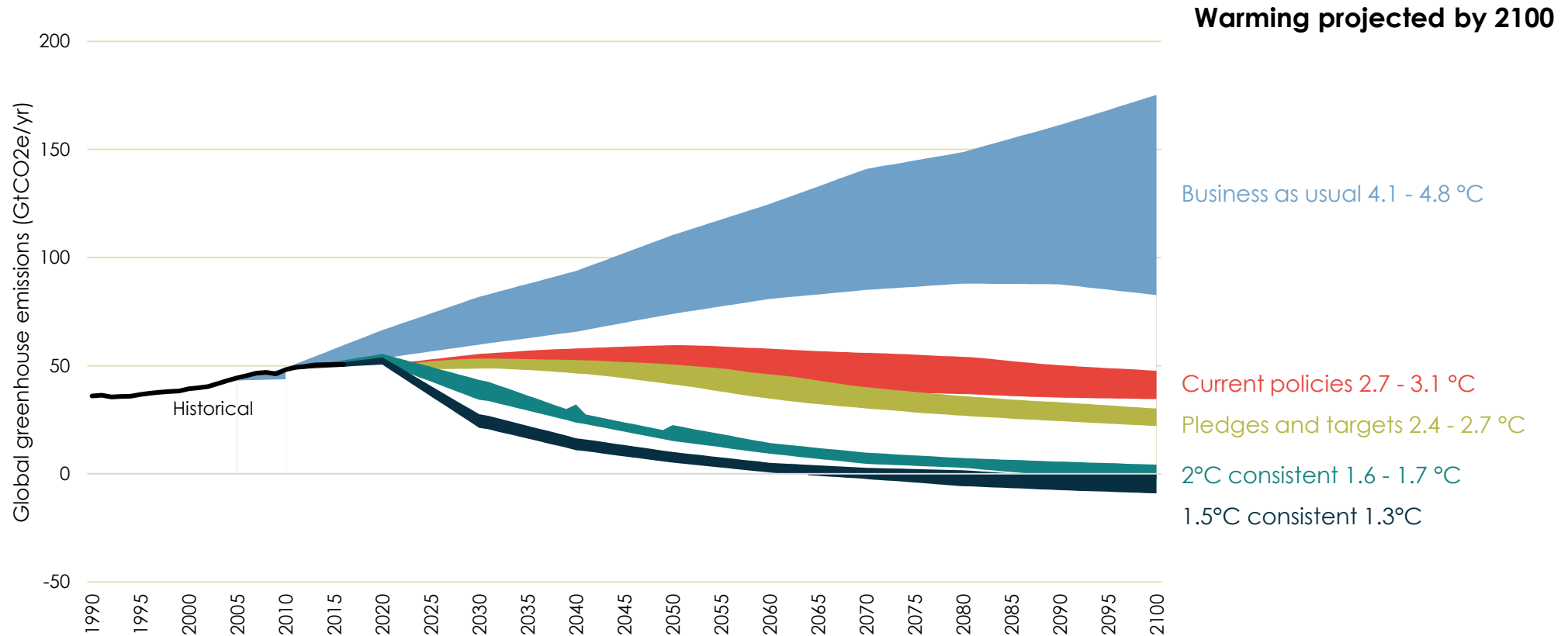


THE GLOBAL CARBON BUDGET...

- Total GHG Emissions define the warming outcome for the planet
- To stabilise warming, we must reach “Net Zero” emissions globally
- To achieve a 1.5°C warming outcome there are just **13 years** left at current rates



The climate imperative



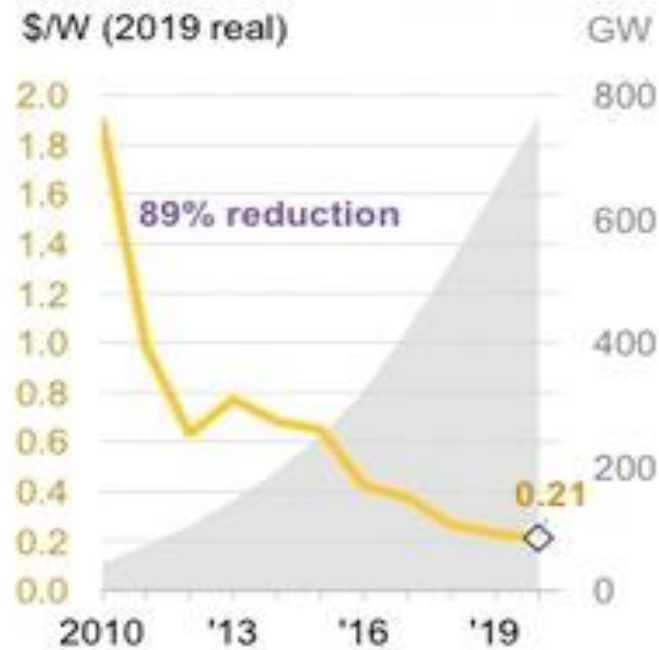
Source: Climate Action Tracker

Audience poll 1

- When is peak demand for fossil fuels?
 - 2019
 - 2030
 - 2040
 - 2050
 - 2100

The technology revolution

Solar PV module prices and cumulative installed capacity



Onshore wind turbine prices and cumulative installed capacity



Lithium-ion battery prices and demand

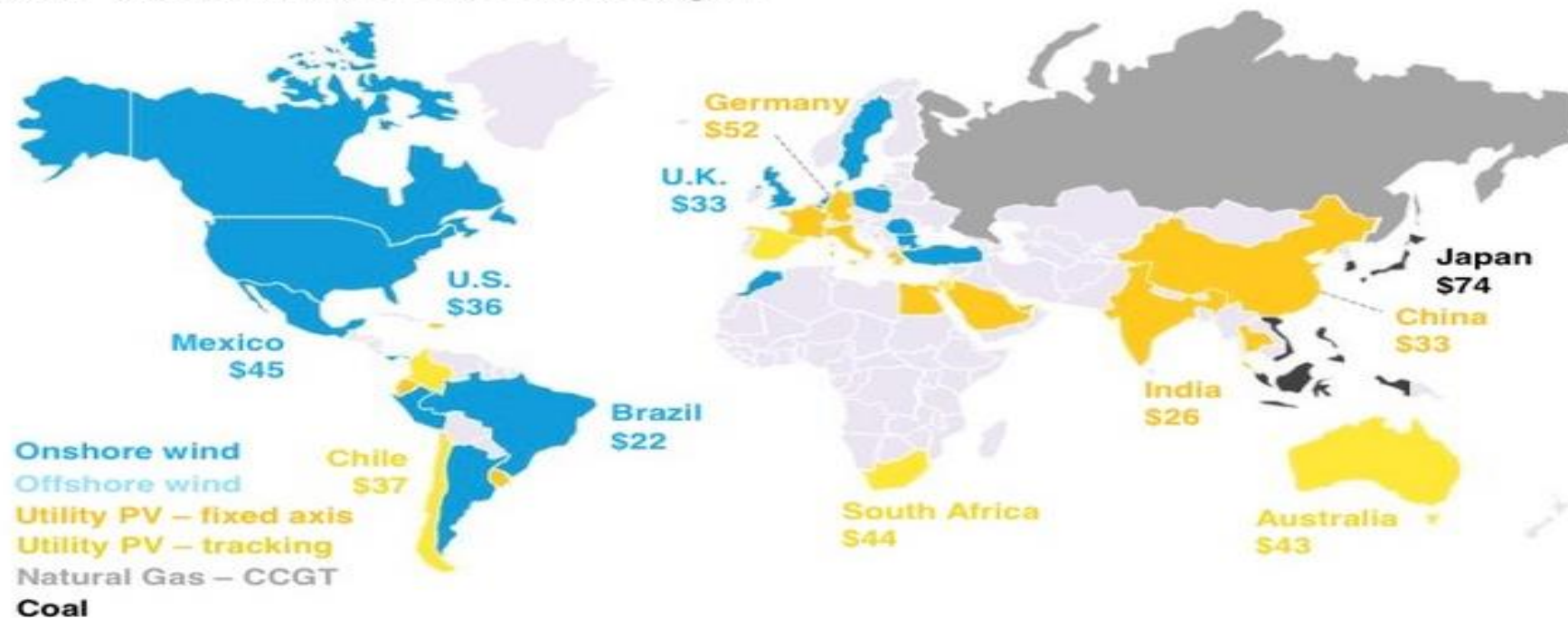


Source: BNEF

Gives the economic advantage to renewables

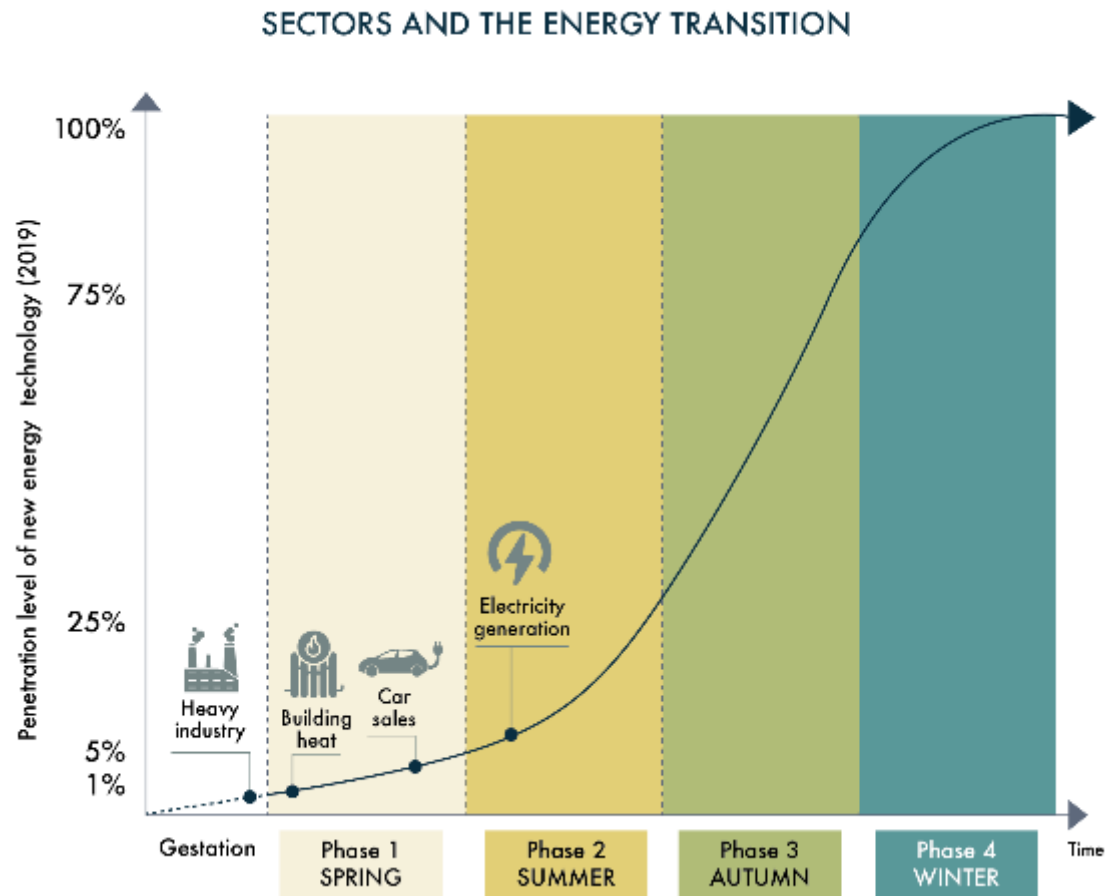
Cheapest source of bulk generation (2H 2020)

New-build solar, wind, coal and gas



Source: BNEF

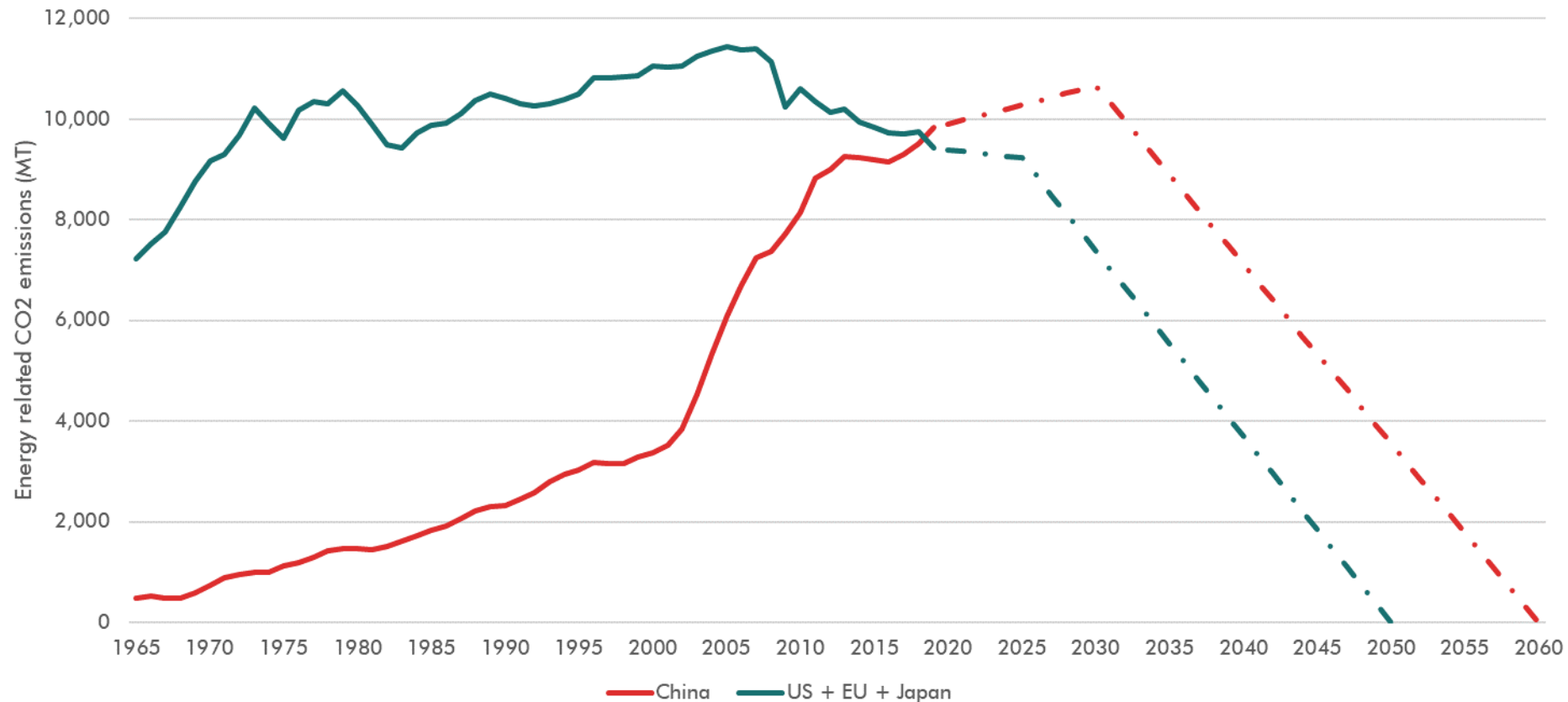
One sector after another



Source: Carbon Tracker, BP Statistical Review 2020, EV-volumes, REN 21

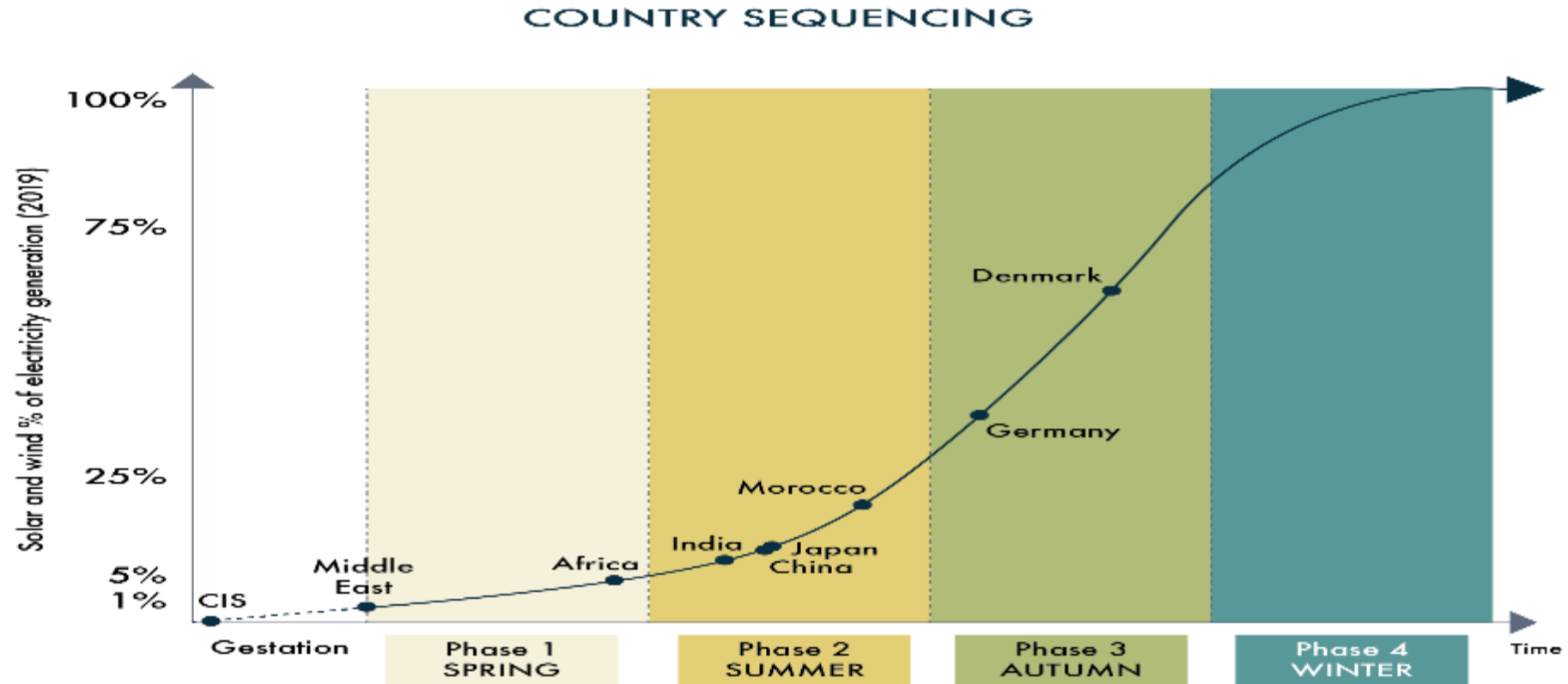
Supercharged by politics

Carbon emissions and government targets (Mt CO2)



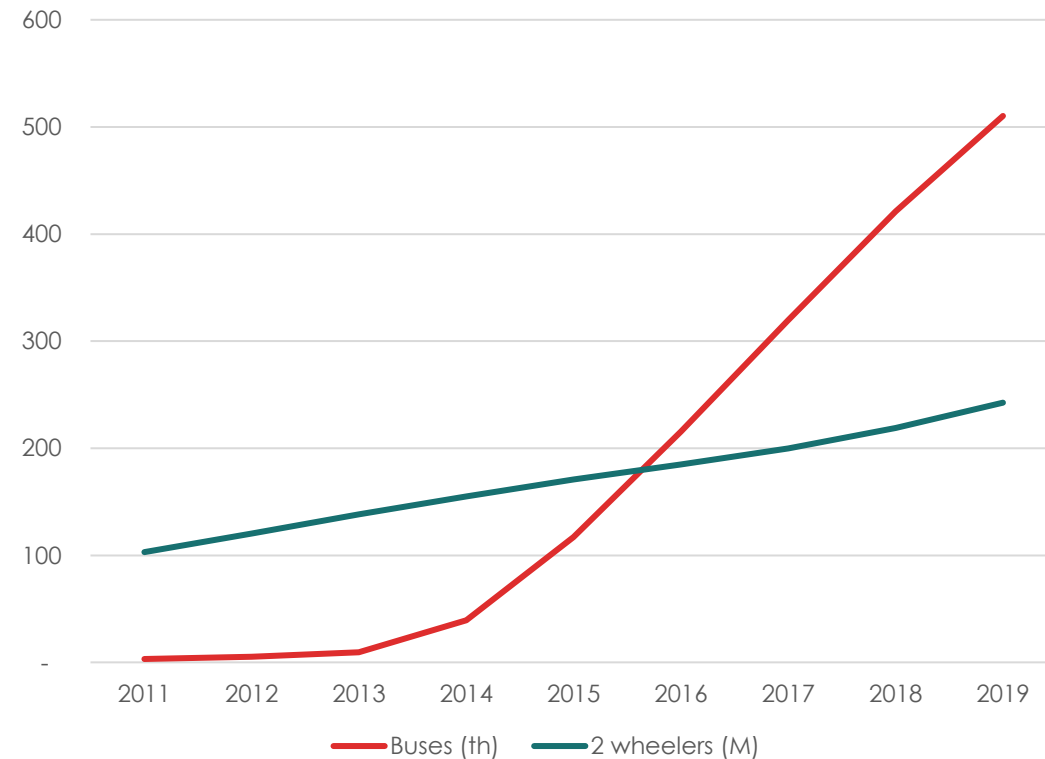
Source: BP Statistical review, government targets

Sequenced by country



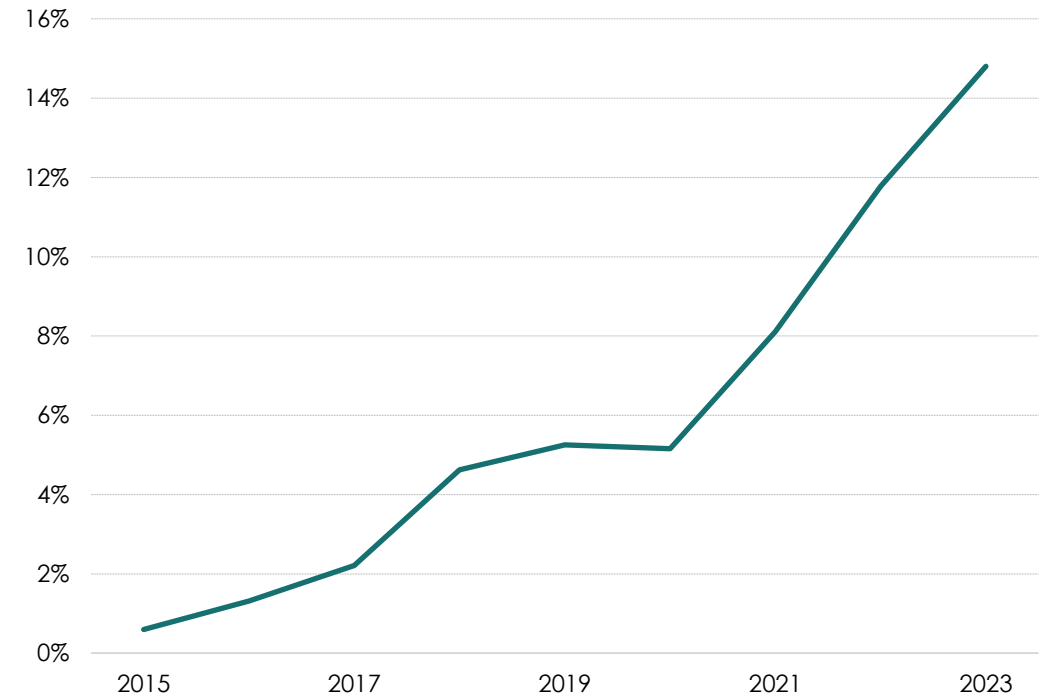
With an emerging market leapfrog

China sales of electric buses and electric 2-wheelers



Source: BNEF

China EV car market share

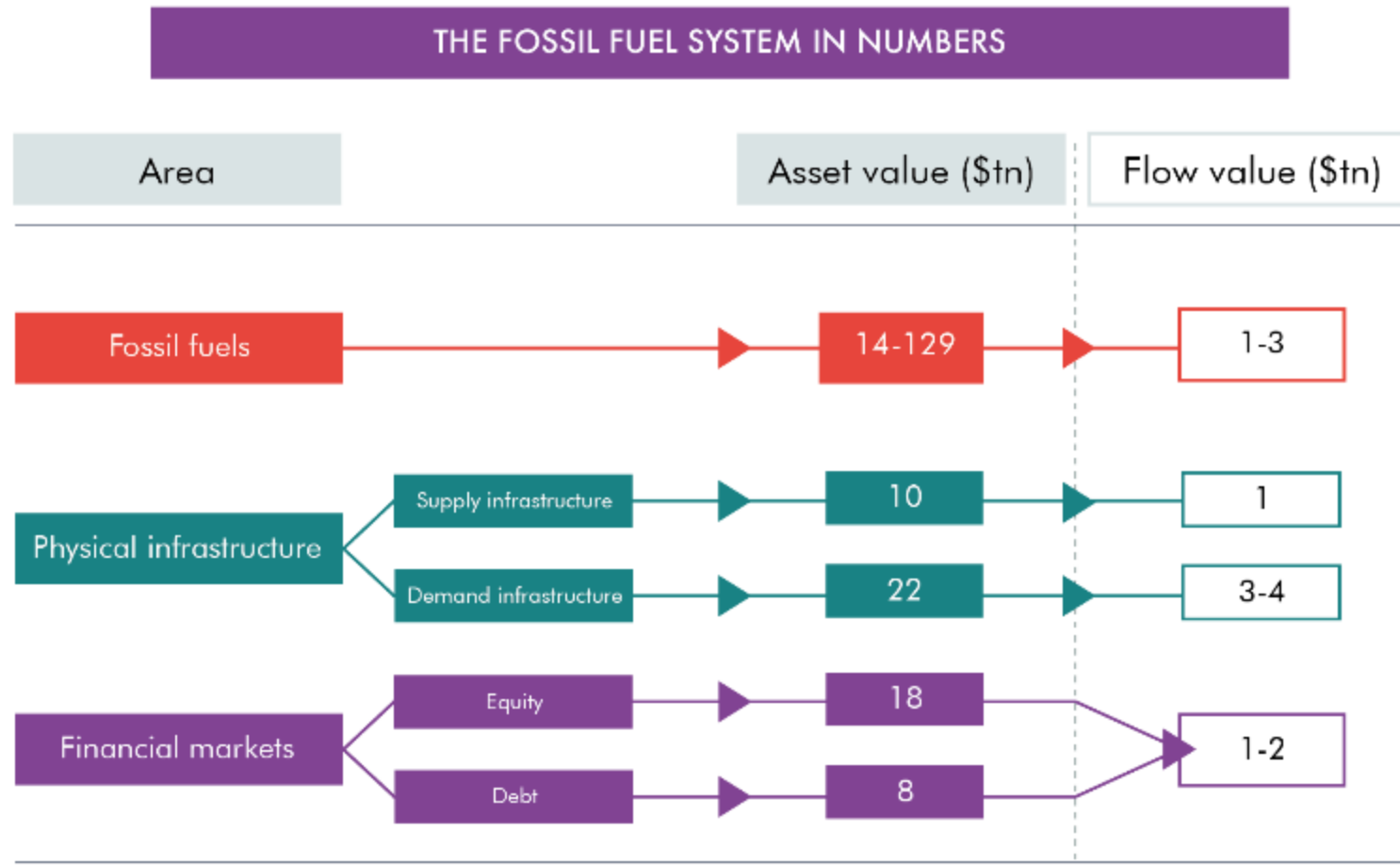


Source: BNEF

Audience poll 2:

- What share of traded debt is linked to the fossil fuel system?
- 5%
- 10%
- 30%
- 50%

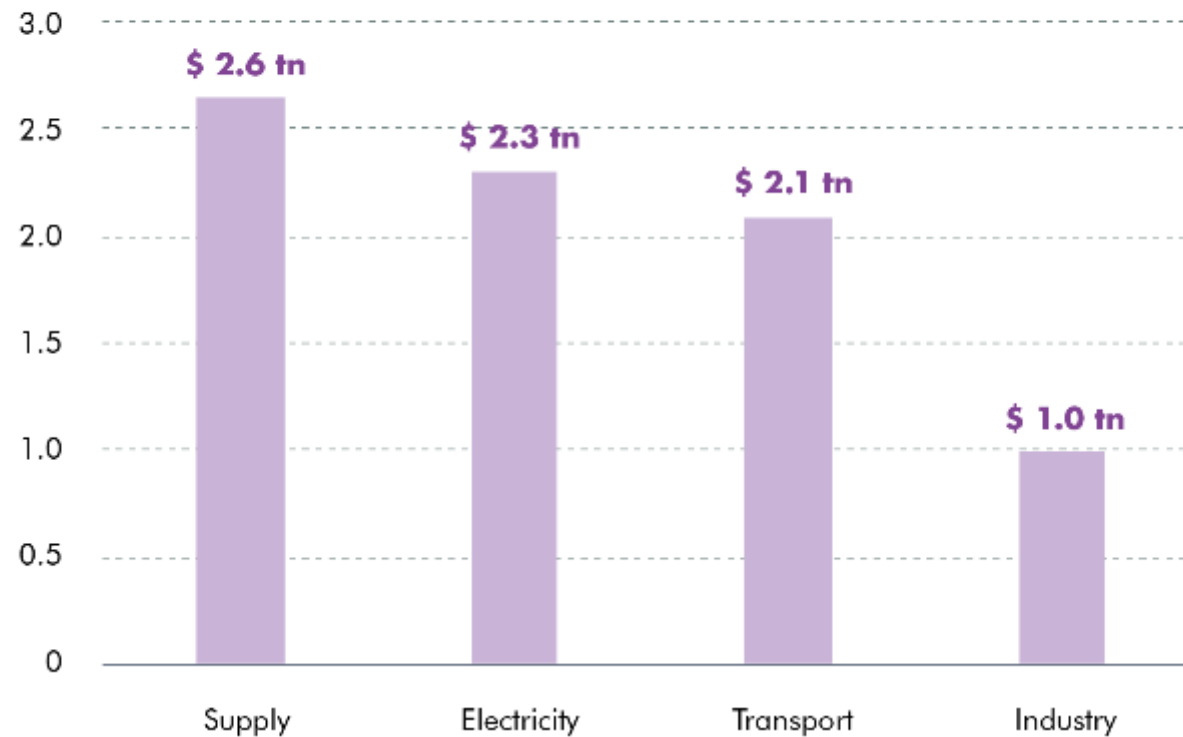
The fossil fuel system is huge



Source: Carbon Tracker

Fossil sectors are half the corporate bond markets

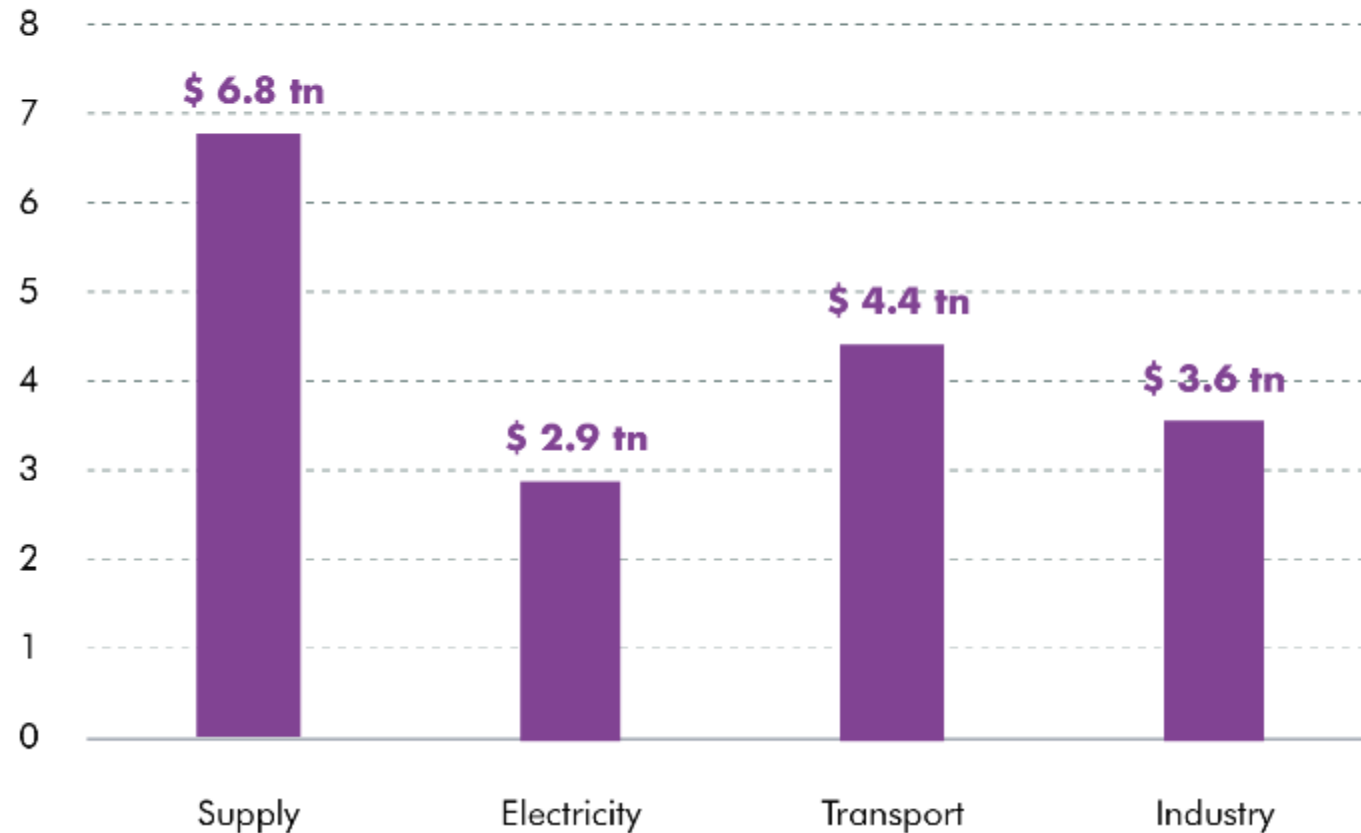
CORPORATE BONDS OF THE FOSSIL FUEL GROUPS (\$TN)



Source: Bloomberg, Carbon Tracker

A quarter of equity markets

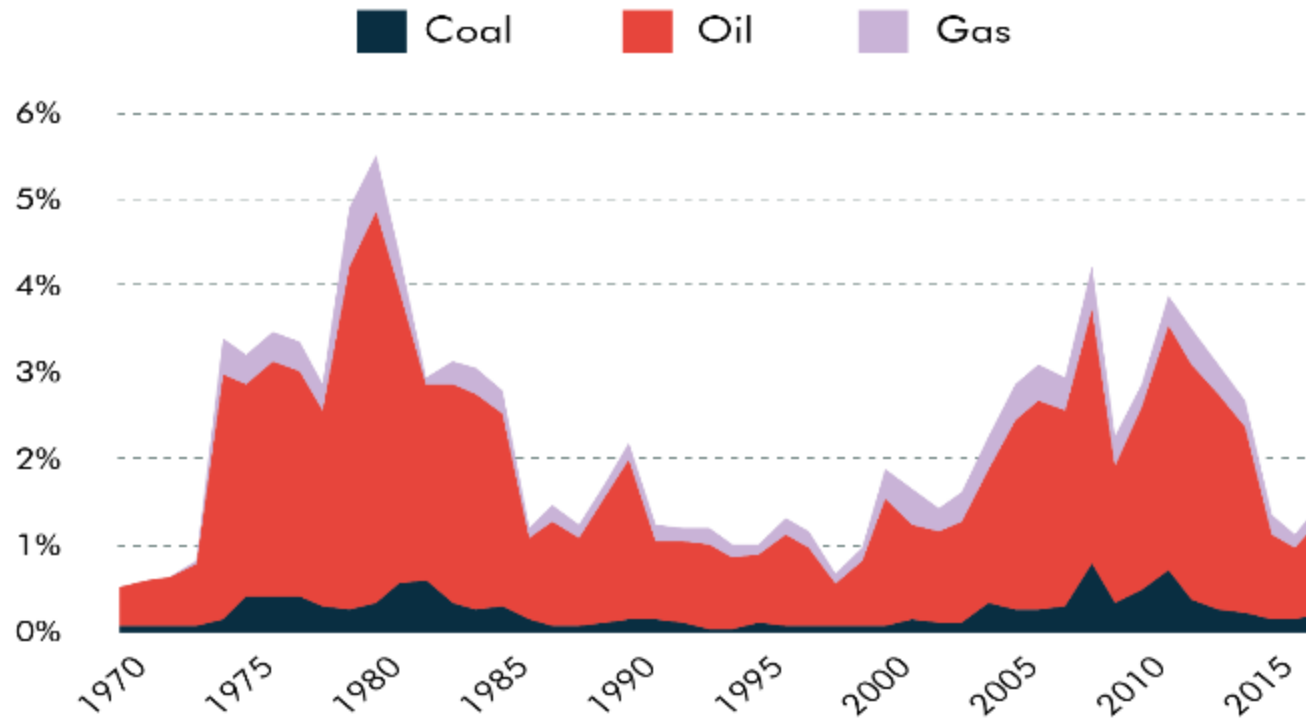
MARKET CAPITALISATION OF FOSSIL FUEL RELATED GROUPS (\$TN)



Source: Bloomberg, Carbon Tracker

And extremely flabby

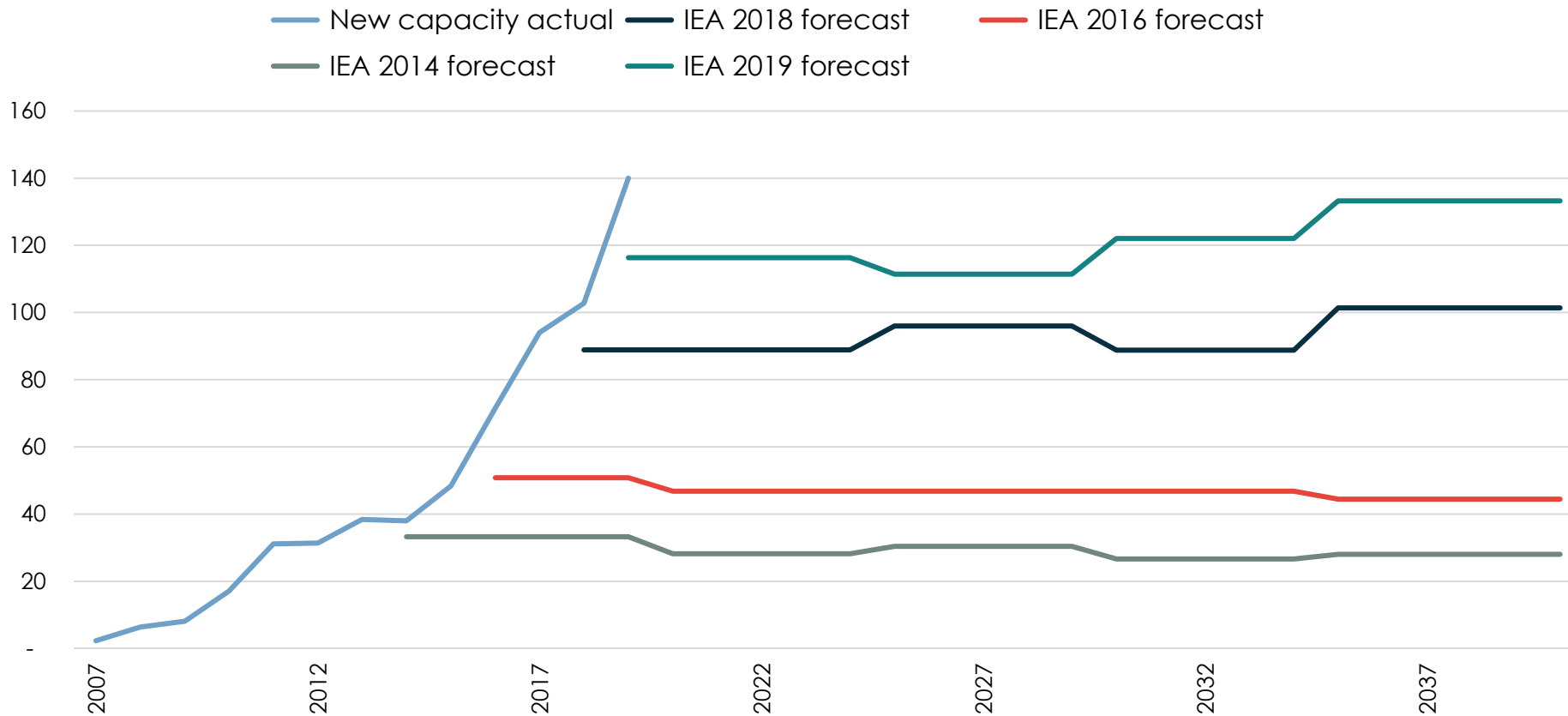
FOSSIL FUEL RENTS AS A SHARE OF GLOBAL GDP



Source: World Bank

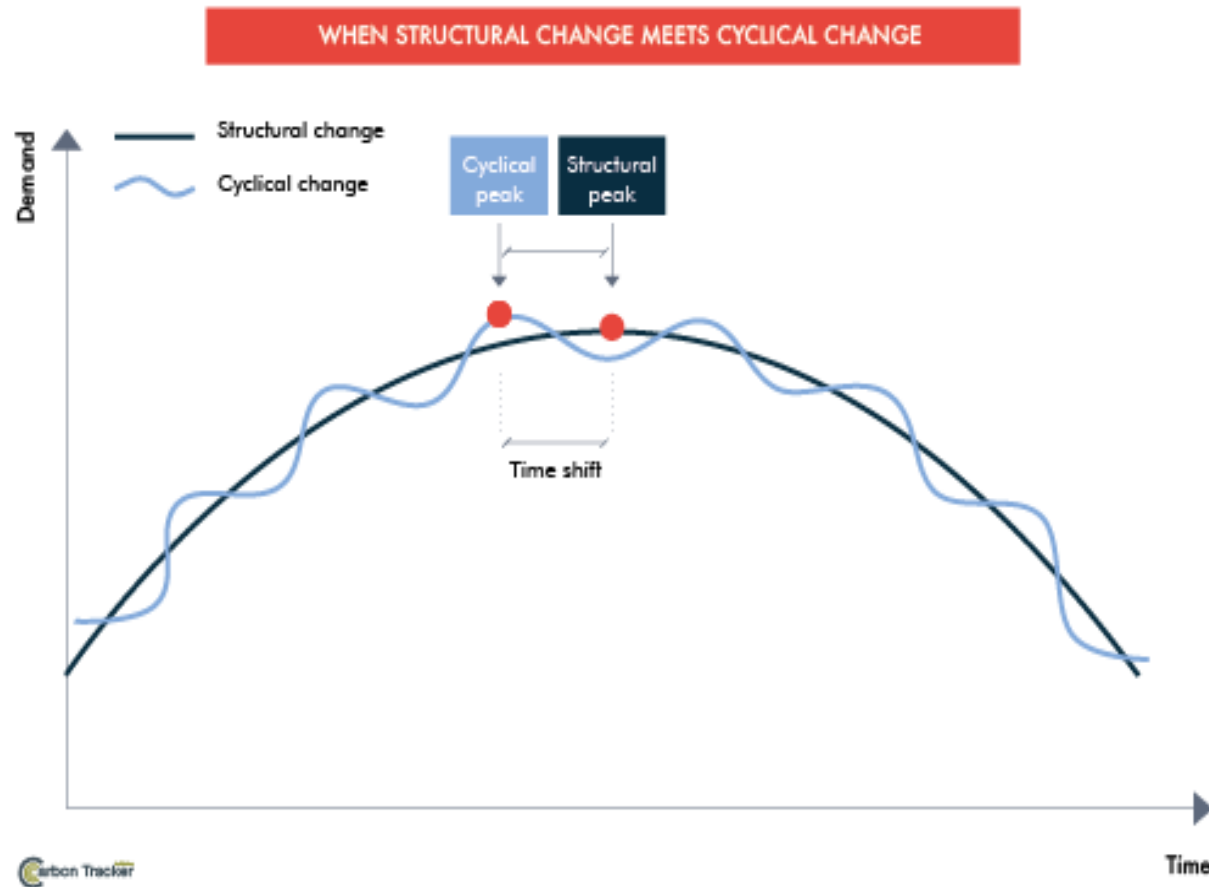
Incumbents are in denial

Annual solar additions (GW)



Source: BP, IHS, IEA, based on methodology of Auke Hoekstra

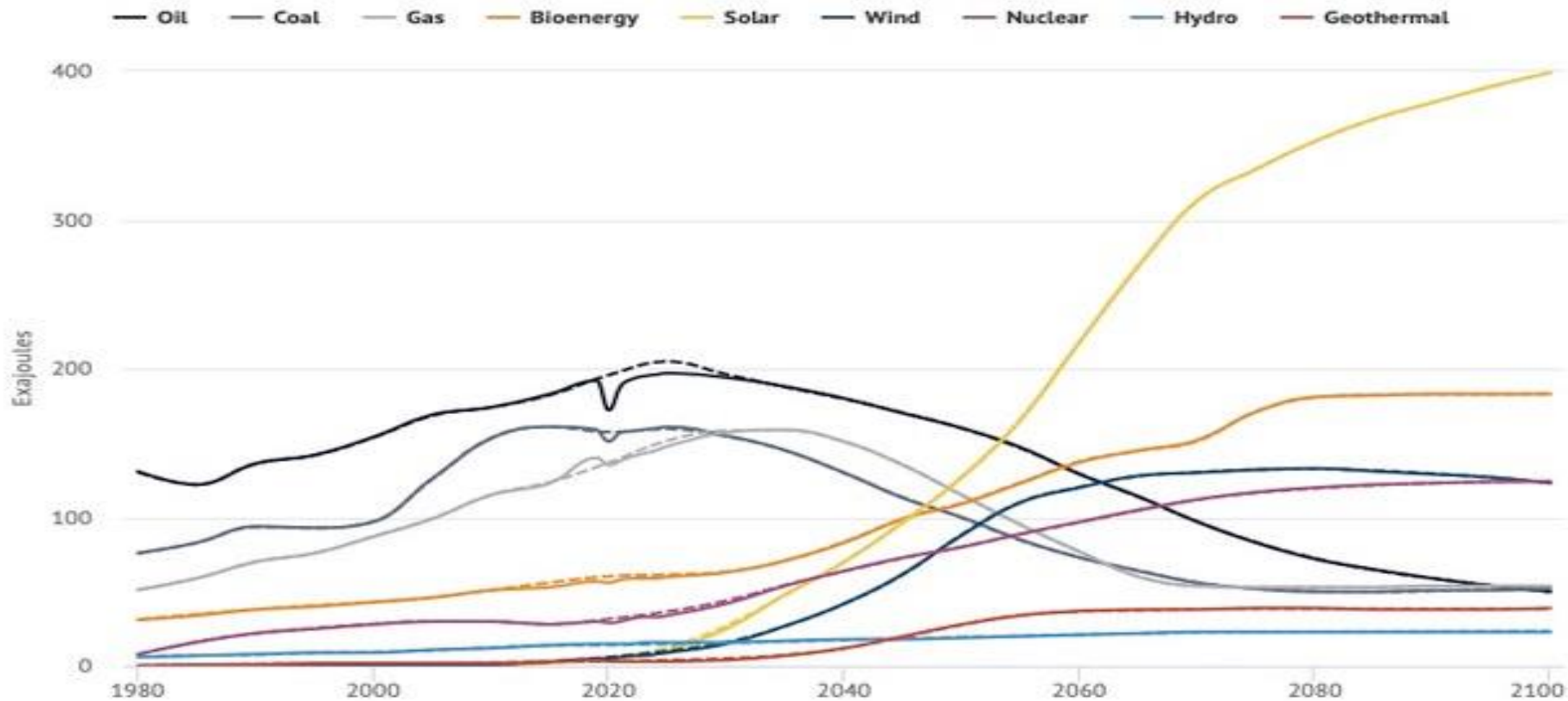
Cyclical shocks bring forward change



Source: Carbon Tracker

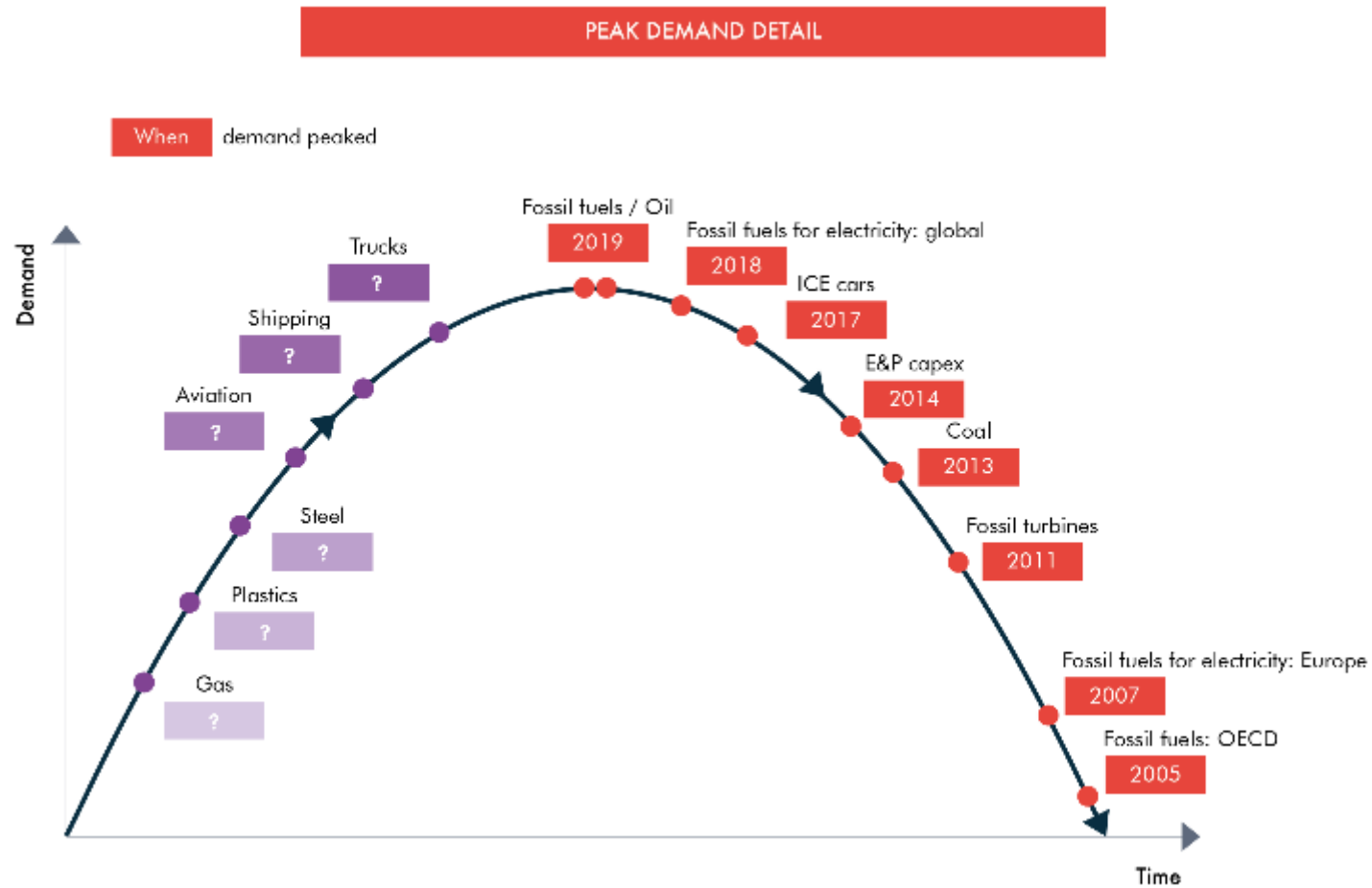
Peak fossil fuel demand was probably 2019

Primary energy supply (EJ)



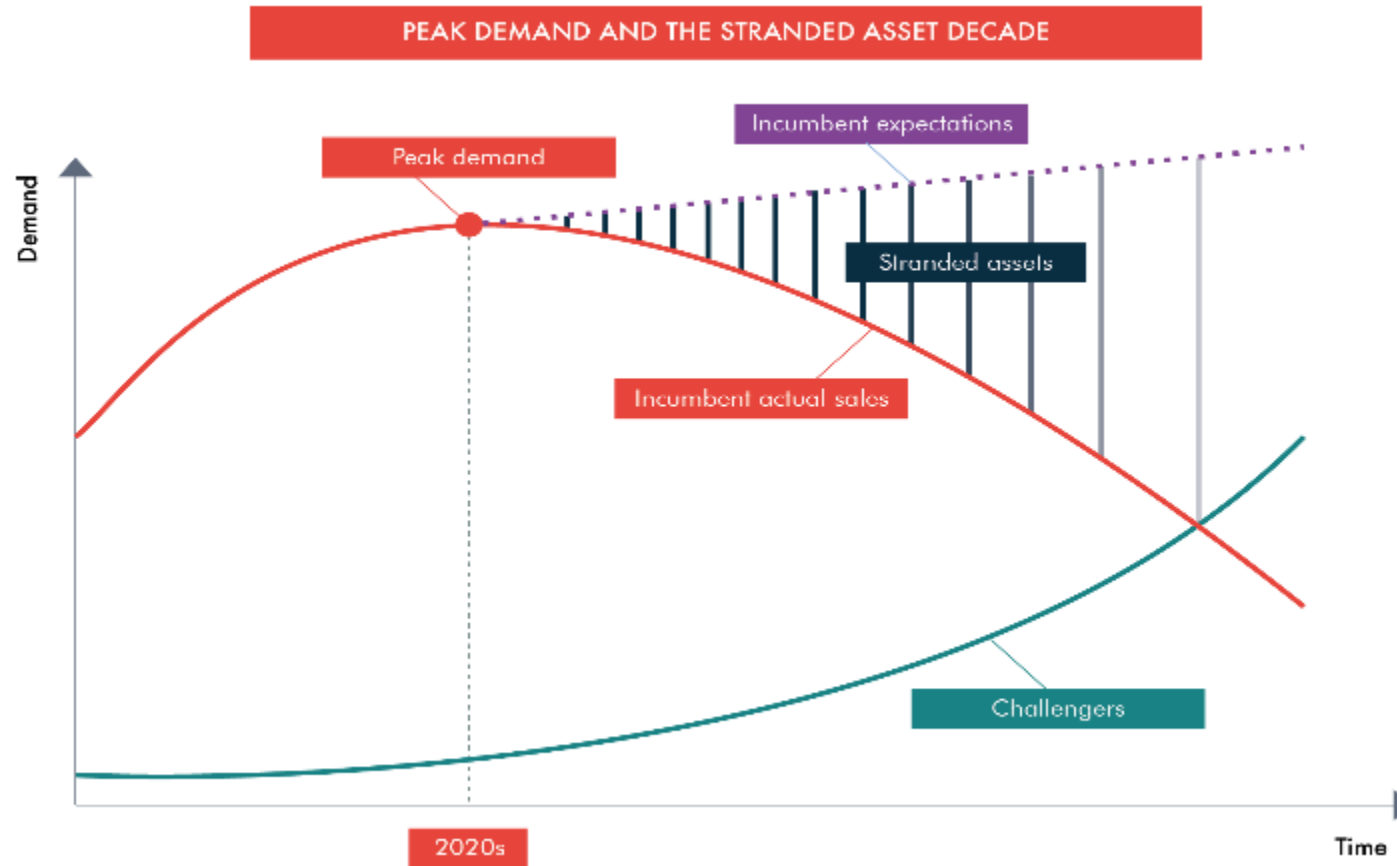
Source: Shell Sky Scenario, Carbon Brief

Peaking demand across the system



Source: Carbon Tracker

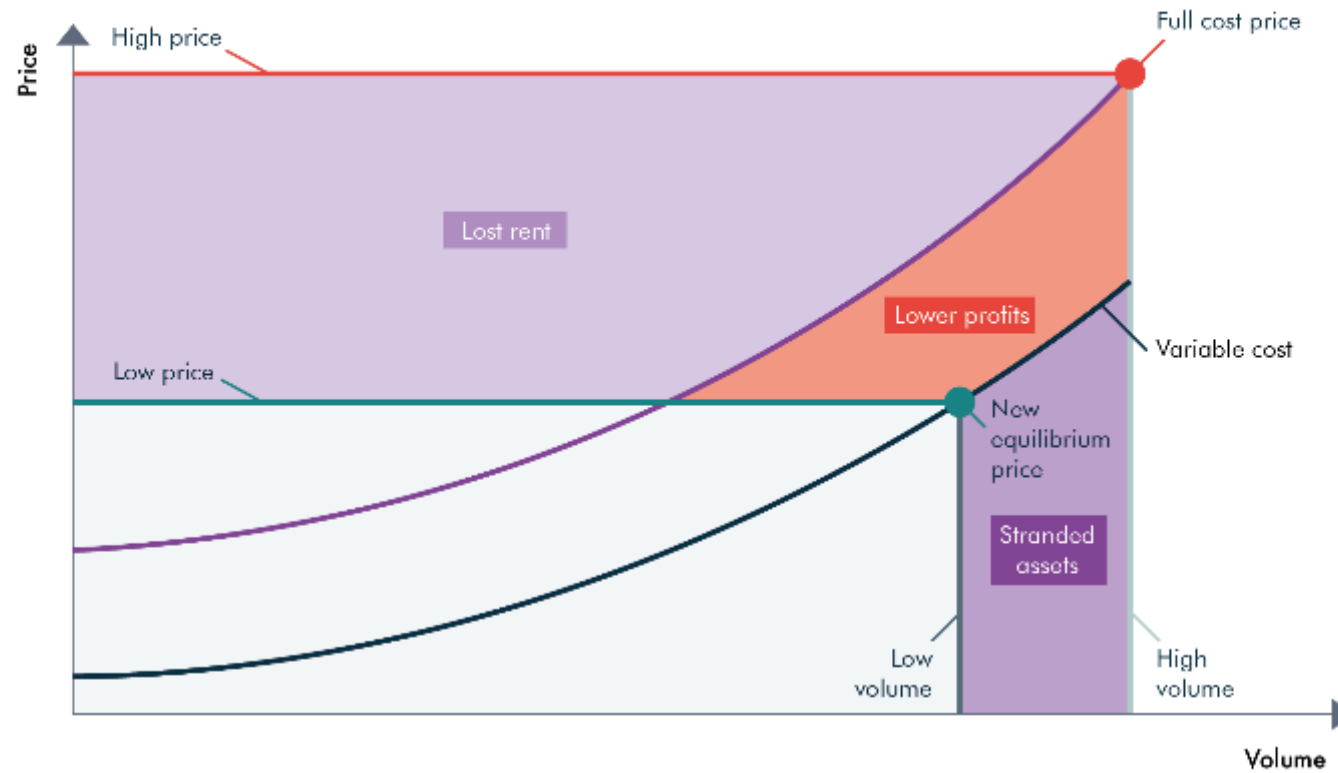
Peak demand means stranded assets



Source: Carbon Tracker

Lower rents and profits

THE IMPACT OF DISRUPTION ON RENT, PROFITS AND STRANDED ASSETS

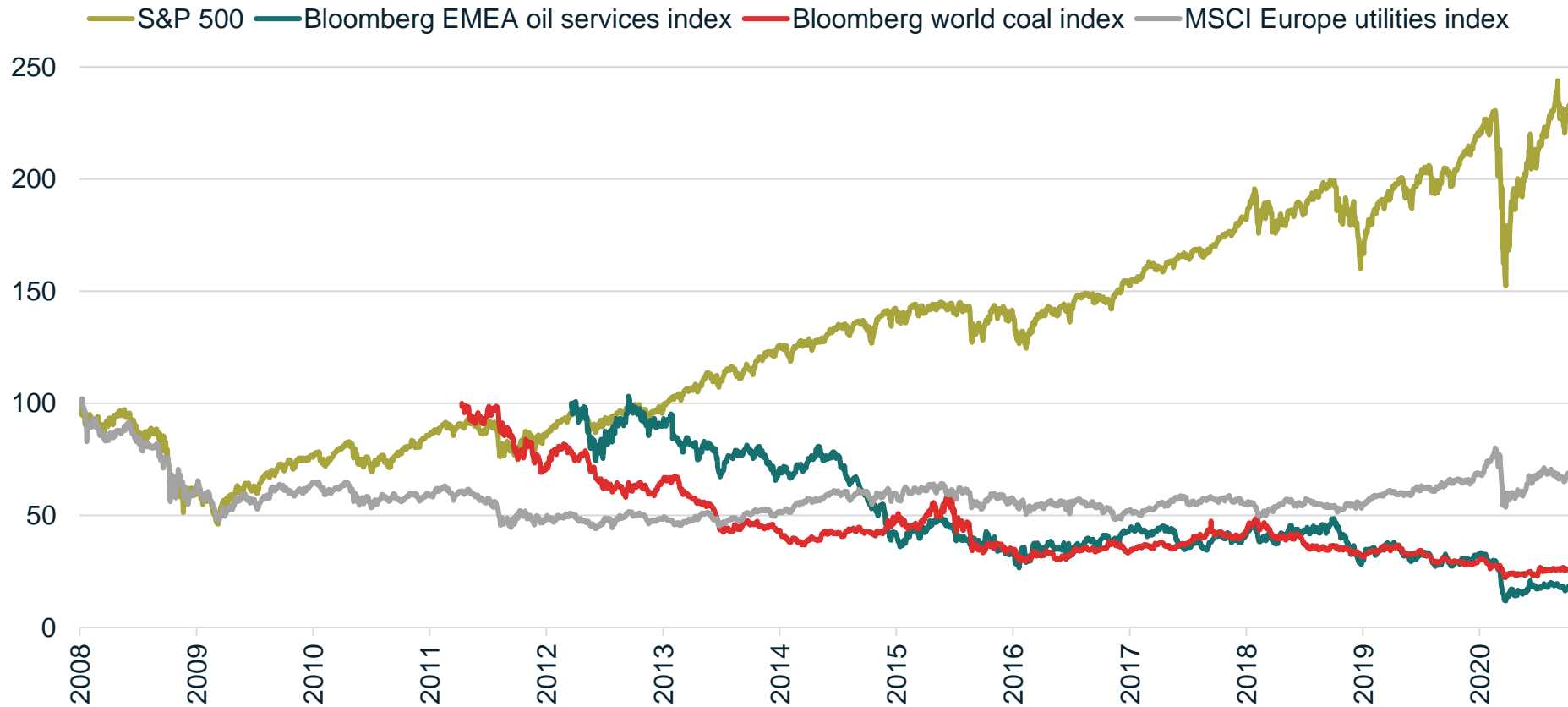


Source: Carbon Tracker

Audience poll 3

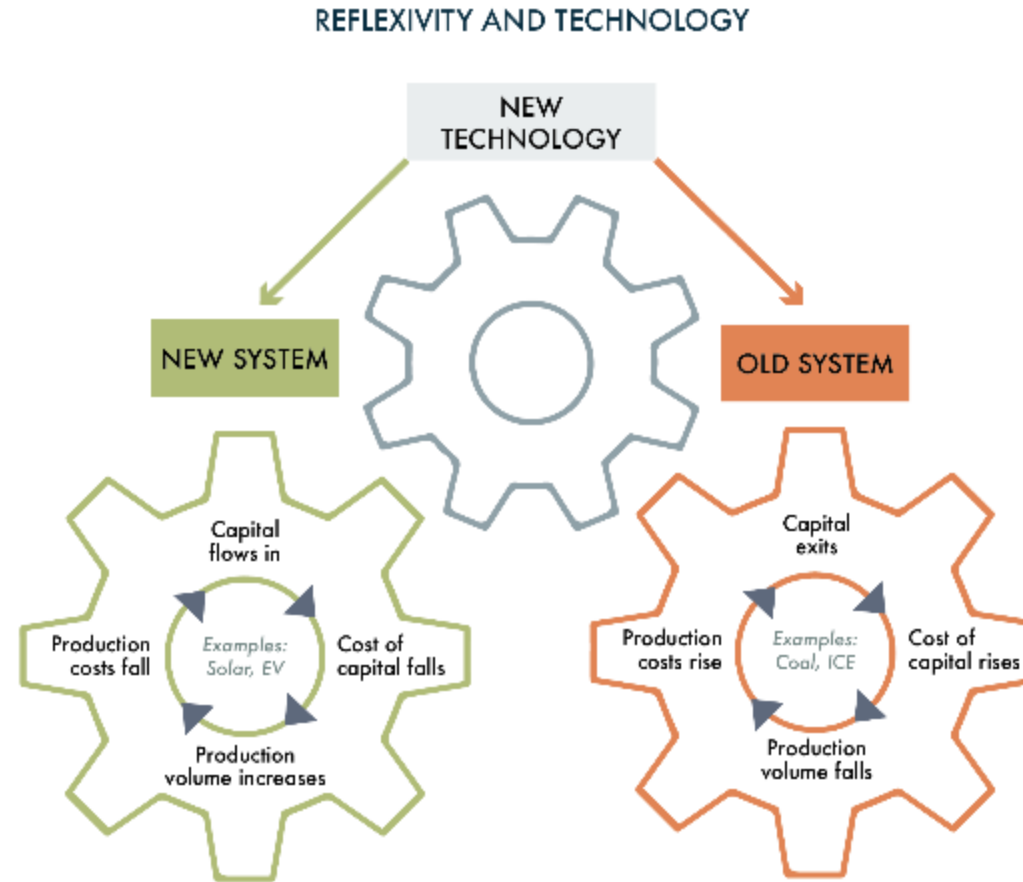
- By how much did US coal stocks fall at the time when global coal demand was 3% below its peak?
- 3%
- 10%
- 50%
- 90%

Financial markets react early



Source: Bloomberg, Carbon Tracker

Reflexivity speeds up change



Source: Carbon Tracker based on George Soros

ESG is not the answer

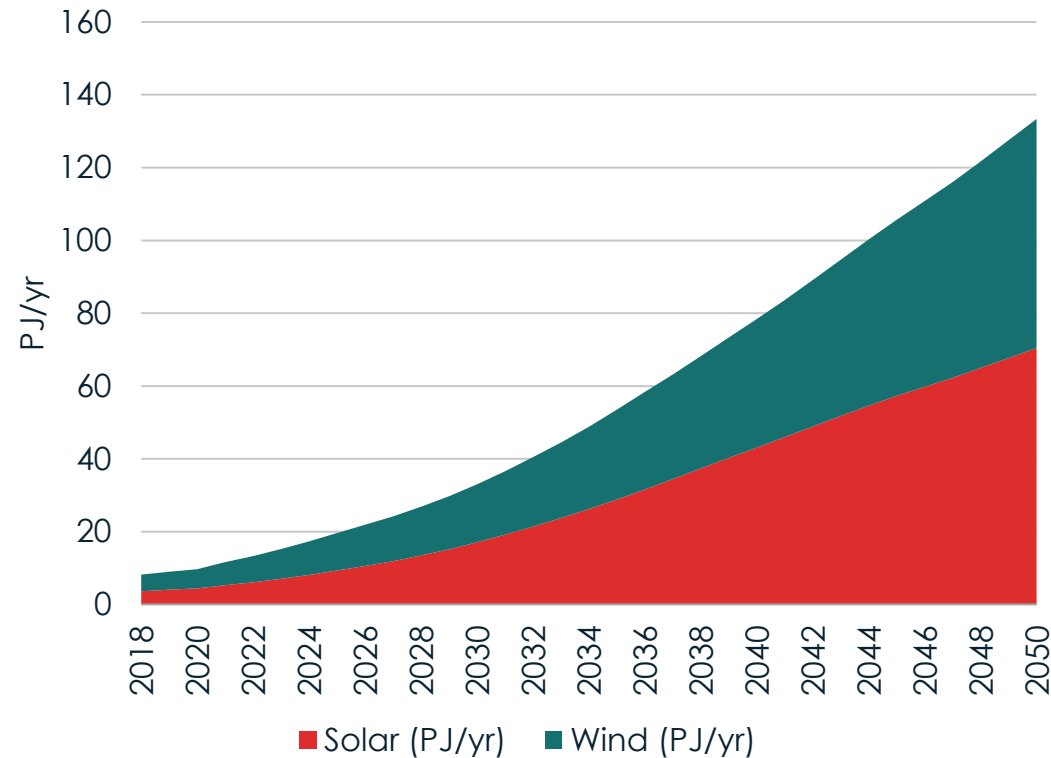
Dow Jones U.S. Coal Index



Source: Bloomberg

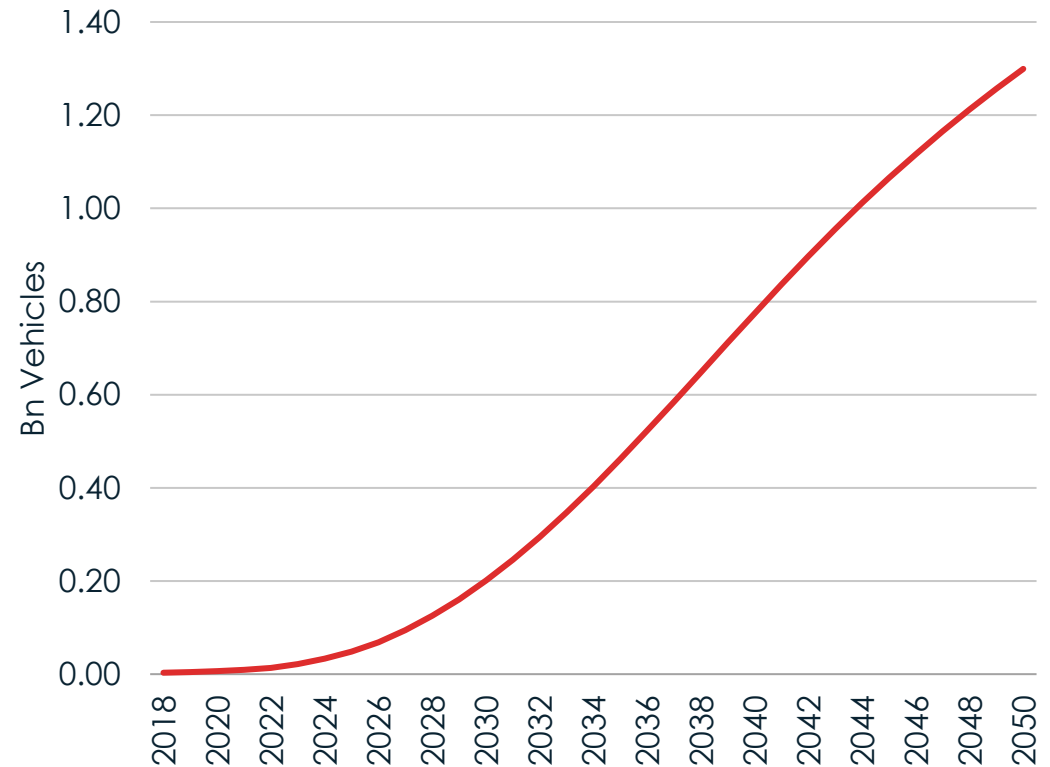
Find the new growth stories

Solar and wind electricity (PJ)



Source: DNV GL

Passenger EV (bn)



Source: DNV GL

Disclaimer

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Thank you for listening

For more information visit:

www.carbontracker.org

 [@carbonbubble](https://twitter.com/carbonbubble)

kbond@carbontracker.org

mcampanale@carbontracker.org

Questions And Answers





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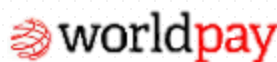
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Thank You For Listening



Forthcoming Events

- Tue, 30 Mar (16:00-16:45) Humanity Detection In Digital Advertising, Utilising Smart Ledgers
- Wed, 31 Mar (12:00-12:45) Why The Roots Of True Conservatism Are Essential To Saving The Planet
- Thu, 01 Apr (10:00-10:45) Gold – The Only True Measure Of Performance
- Wed, 07 Apr (15:00-15:45) How Could Covid-19 Vaccine Passports Be A Bad Idea? A Discussion
- Thu, 08 Apr (10:00-10:45) TLA Blockchain – Legal & Regulatory Guidance

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