Twitter Thread by Ed King





It's (nearly) five years since the Paris Agreement was gaveled through... but was it any good? Tricky question. Based on emissions, temperature data and impacts, no. *But...* (thread)

The team at <u>oscillation</u> have crunched the numbers & reviewed how far + fast sectors have shifted since 2015. Their take is the global economy could be a decade away from seismic tipping points that see the world move fast towards low carbon.

In 2015, zero-carbon technologies and business models could rarely compete with incumbent carbon-solutions. In 2020, zero-carbon solutions are competitive in sectors representing around 25% of emissions. In 2030 the figure's looking like 70%.

Low-carbon solution maturity Increasing share of new sales / build Solution Niche Mass Late Development market market market **Building heating** ilding heating Land Use Change Land Use Change 2015 2020 Low-carbon solutions Mass markets in sectors 0% 25% 70% accounting for __% emissions Niche markets in sectors 41% 48% 12% accounting for __ % emissions

Exhibit 1: Low-carbon solutions by sector – progress since Paris and look forward to 2030

Source: SYSTEMIQ analysis; CO2e emissions breakdown (current) informed by IEA, Energy Transitions Commission, Food and Land Use Coalition; World Resources Institute, Climate Watch. Emissions breakdown in all years represented by current emissions breakdown.

What does this mean for a COVID-smashed world, where 2021 is shaping up to be a hellish mix of recessions and mass unemployment? Well, the 2020s could see a net increase of 35 million low carbon jobs if governments roll out the right policies + invest wisely.

Can the low carbon acceleration be pinned to Paris? Not entirely, but partly. In 2014 no-one talked of net zero targets. Now 120+ countries either have these plans or are working on them. By mid 2021 the US, China, EU, UK, Japan, Korea, Canada will have these targets.

The Paris "ratchet" is nationally determined, not imposed by the UN. Leaders get to decide. They are increasingly deciding to be more ambitious. Cities and regions are joining the party: well over 50% of global GDP now has Paris-aligned targets.

A climate-safe planet is not assured, but technology shifts fast. In 2014, <u>@IEA</u> forecast average #solar prices would reach \$0.05/kWh by 2050. It took only 6 *not* 36 years to hit that price. Solar and wind will be the cheapest form of new generation everywhere later this decade.

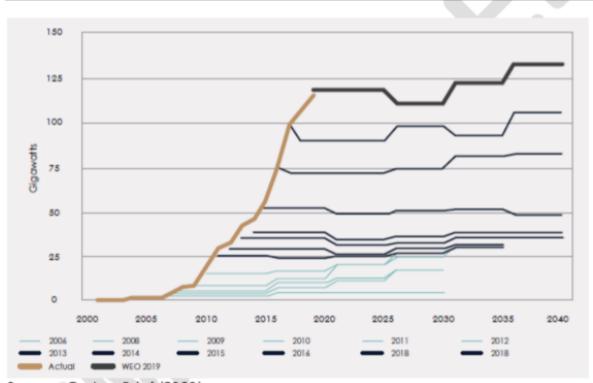


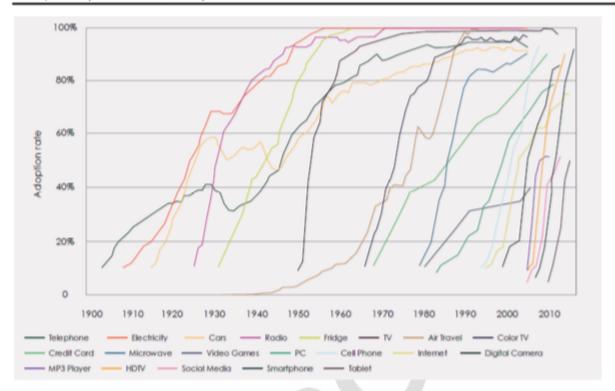
Exhibit 2: the solar market has seen growth orders of magnitude faster than forecast

Source: CarbonBrief (2020)

Only we could have. New markets often grow on exponential curves. From the motorised car to colour TVs, disruptive solutions can scale from 2-3% market share to over 80% share within 10-15 years. 95 (See Exhibit 3.)

Before 2024, electric vehicles (EVs) will beat internal combustion on sticker price parity, a fraction of the maintenance, unparalleled acceleration, and near equal range. Combustion engines could go the same way as DVDs. Once an innovation, now killed by @netflix.

Exhibit 3: Market inflection points in consumer products have led to incredibly fast adoption (1900-2010, USA)



Source: Blackrock Investment Institute, Asymco (2014)

It's not just power and EVs. Today, there are 66 zero-emissions shipping pilots. 200 electric airplanes are in development. SystemIQ reckon electric aviation will be commercial by the mid 2020s — 2030s for larger planes. Low carbon steel, cement, aluminium pilots are a reality.

Big oil sees the writing on the wall, quitting long-life projects: since 2014, the average lifetime of major industry projects has declined from 50 to 30 years and the trend is accelerating. Money spent on dirty, old sectors could be a dollar that an investor might not get back.

Yeah, but. The 2020 <u>@UNEP</u> #EmissionsGap is bleak. A thread by <u>@Peters_Glen</u> this week highlighted governments have largely failed to use COVID stimulus packages to go green not dirty. Dollars have been poured into fossil fuel industry black holes instead of backing the future.

Temperatures continue to rise, impacts mount, climate finance flows go down, the whole concept of multilateralism looks shaky. And yet, to rip off the @SYSTEMIQ_Ltd report's Executive Summary, 'The case for enlightened self-interest has never been stronger'.

Tangible shifts are taking place in the face of wealthy and powerful incumbent forces. External elements are moving faster than many realise. The digitisation of the economy and connected world is accelerating learning. Low interest rates benefit investors in new capital.

And yes, public opinion is shifting. Consider elections for the EU Presidency, UK, New Zealand and US were all won in 2019–2020 on a strong #climate platform. Polling (I defer to <u>@LeoBarasi</u> on this) shows strong support for greener spaces, cleaner air, a safer environment.

It's not to say we'll be fine on climate, that all investors in the City of London and Wall Street are piling into sustainable investments - @MCL1965 @JAmbachtsheer @stevewaygood @AssaadRazzouk @JG_climate @CampanaleMark are the ones to follow here

It's not to say the changes aren't scary for many who rely on incumbent high carbon sectors. Govts need solid transition plans (like <u>@Teresaribera's</u> in Spain). But change is happening, and we either accept that and swim with the flow, or ultimately we get swept along.

Final thought: Tackling the #climate crisis is often now referred to as a 'sprint'. Sprinters typically take 40–50 metres to hit top speed. Post Paris, the low carbon athlete is - what - in the 10–20m transition zone phase? Heads coming up, bodies straightening, legs powering.

Key rivals — impacts, temperatures, emissions — are ahead. But the low carbon runner isn't close to top speed. The 2020s are when they turn up the (green) gas. A decade of transition and truth awaits.

Full report here... @usainbolt will love it https://t.co/SEWhBo1rJP