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Analysing the green tech IP landscape

WIPO Green webinar series, March 2022

Chris Harrison

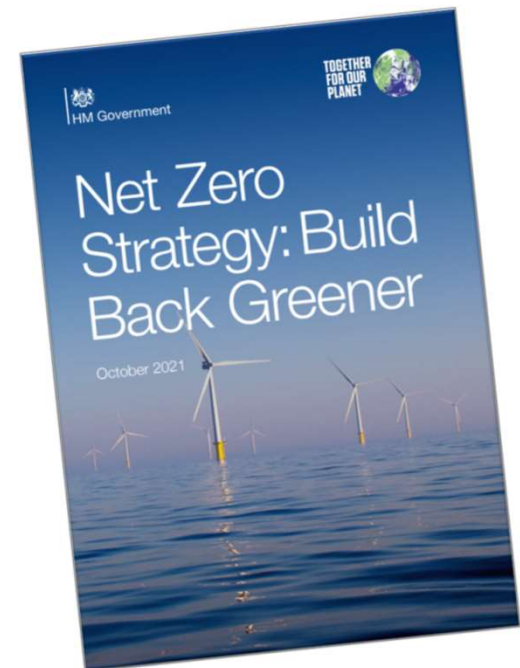
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Intellectual Property Office is an operating name of the Patent Office

The path to net zero

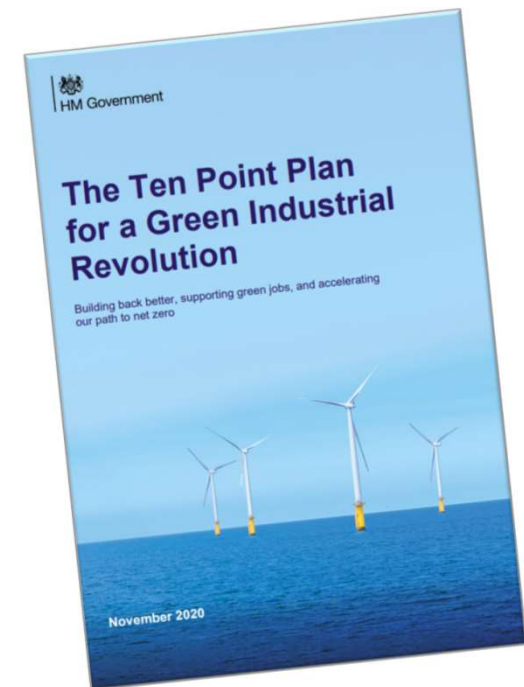
- In 2019 the UK was the first major economy to embrace a legal obligation to achieve net zero carbon emissions by 2050
- In 2020 the UK published a Ten Point Plan for a Green Industrial revolution
- In 2021 the UK published a net zero strategy to keep us on track for UK carbon budgets and net zero by 2050



UK Ten Point Plan for a Green Industrial Revolution

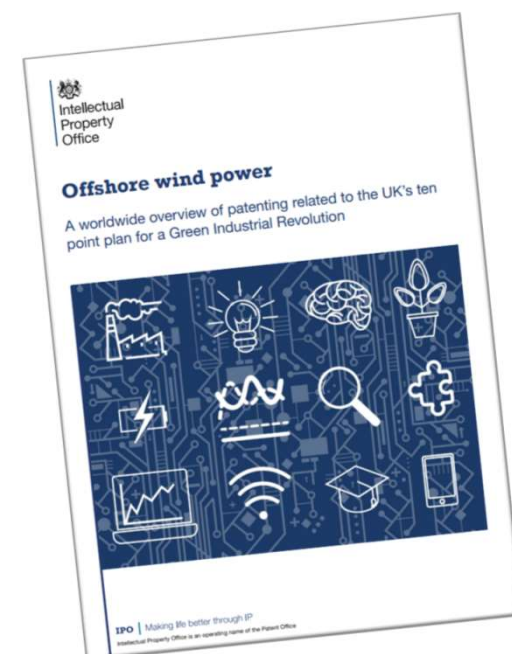
The plan focuses on increasing ambition in the following areas:

- advancing offshore wind
- driving the growth of low carbon hydrogen
- delivering new and advanced nuclear power
- accelerating the shift to zero emission vehicles
- green public transport, cycling and walking
- ‘jet zero’ and green ships
- greener buildings
- investing in carbon capture, usage and storage
- protecting our natural environment
- green finance and innovation



The green technology patent landscape

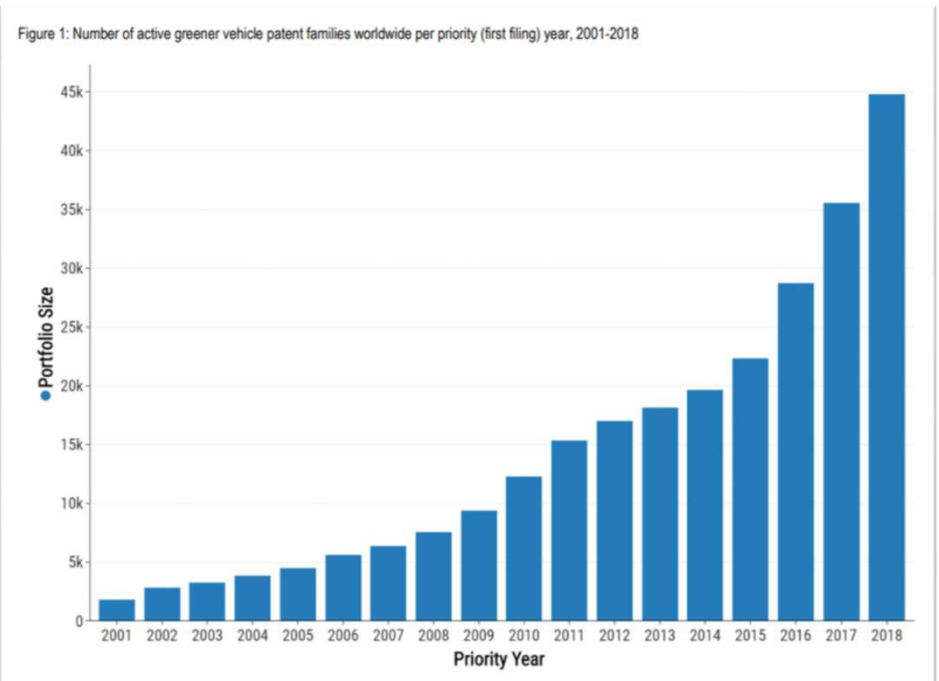
- UKIPO has published a series of seven mini-reports looking at the worldwide patent landscapes in the different green technology areas of the Ten Point Plan for a Green Industrial Revolution:
 - [offshore wind](#)
 - [low-carbon hydrogen](#)
 - [nuclear power](#)
 - [environmentally-friendly transportation](#) (zero emission vehicles, green public transport, jet zero and green ships)
 - [heat pumps \(greener buildings\)](#)
 - [carbon capture, usage and storage](#)
 - [flood and coastal defences](#) (protecting our natural environment)
- These reports were published on the Science and Innovation day of the UN COP26 Summit that was held in Glasgow, UK, in November 2021



The green technology patent landscape

Key findings:

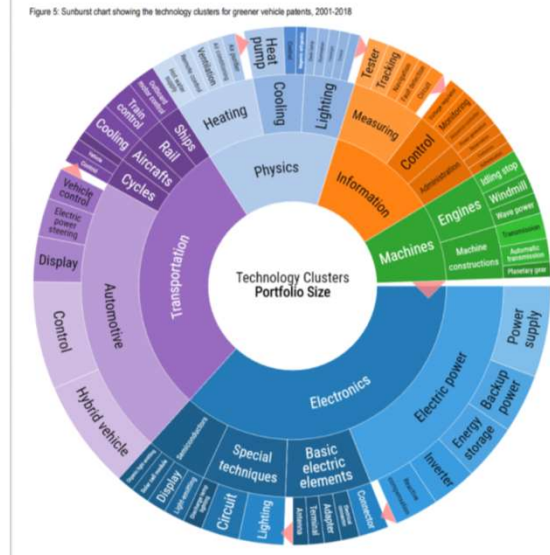
- The number of patents being filed worldwide in these green technology areas has significantly increased over the past 20 years
- There is particularly strong growth in the worldwide patenting of wind power, hydrogen power and 'green' vehicle technologies, which have seen their annual levels of patenting more than double in the past five years alone
- For the majority of these green technology areas, China and the US have the largest absolute levels of patenting activity



The green technology patent landscape

Key findings:

- When comparing the top 10 patenting countries worldwide, the UK has a Revealed Technological Advantage and a degree of specialism in the patenting of wind power, nuclear power, greener buildings, greener vehicles and CCUS (carbon capture, usage and storage)
- The UK is particularly specialised in offshore wind power and greener buildings, and is ranked 1st of the top 10 patenting countries worldwide in these technology areas



Revealed technological advantage (RTA)

Relative Specialisation Index ranking	Offshore wind	Low-carbon hydrogen	Nuclear power	Greener vehicles	Greener buildings	Carbon capture, usage and storage	Flood and coastal defences
1	UK	Australia	France	Germany	UK	Australia	South Korea
2	France	Canada	UK	France	France	Canada	Australia
3	South Korea	USA	Canada	UK	Australia	India	Canada
4	India	France	South Korea	USA	Canada	UK	Japan
5	Australia	Germany	Japan	Canada	Germany	South Korea	China
6	China	Japan	USA	India	India	USA	France
7	Germany	UK	China	South Korea	USA	France	UK
8	USA	South Korea	Australia	China	South Korea	China	India
9	Canada	India	India	Australia	China	Japan	USA
10	Japan	China	Germany	Japan	Japan	Germany	Germany

Further work

- Now expanding this work beyond the green technologies of the UK Ten Point Plan for a Green Industrial Revolution
- Delve into the differences between patenting of climate change mitigation technologies (CCMT) and climate change adaptation technologies (CCAT)
- Analysing how the UK's Green Channel route for accelerated patent processing is being utilised
- Build on the methodology developed by the EUIPO looking at the [green trade marks](#)

- The role of IP in supporting green technologies and promoting innovations to help us get to net zero is a key corporate priority for UKIPO and an area we are actively working on going forwards

Thank you

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