



# SUSTAINABILITY NEWS HEADLINES

## Global Carbon Market Grows 20% to \$272 Billion in 2020

The value of the global carbon market increased by 20% in 2020 to US\$ 272 billion, financial analysis company Refinitiv said in a recent report. The increase in value marks the fourth consecutive year of record growth for the global carbon market, which has expanded more than five-fold since 2017.

Most of the increase in value in 2020 came from the EU Emissions Trading System (EU ETS). The EU ETS, with a total market trading volume at 10.3 billion carbon allowances, accounted for nearly 90% of global value of carbon market in 2020. This growth in trading happened despite an estimated 14% drop in emissions under the EU ETS in 2020, Refinitiv said.

The North American regional carbon markets – the Western Climate Initiative (WCI) and the Regional Greenhouse Gas Initiative (RGGI) grew by 16%, in terms of overall market value, to \$26 billion and \$2.0 billion, respectively.

Meanwhile, with the publication late last year, of the long-awaited rules for China's national Emissions Trading System, China is about to launch the world's largest carbon market. This national ETS, by the world's biggest emitter, will eclipse the EU ETS.

China hopes the new national carbon trading system will drive down emissions, as part of the steps towards decarbonising its economy by 2060. Under the national ETS, more than 2,200 power companies across the country, responsible for over 26,000 tonnes of carbon emissions a year, could now trade their emission quotas.

# 70%

### Agree to Goal-Zero

Almost 70% of the world's economy has committed to the final goal of 'net-zero' emissions between 2050 and 2060. (KPMG)

# 40%

### EU Emissions Cuts

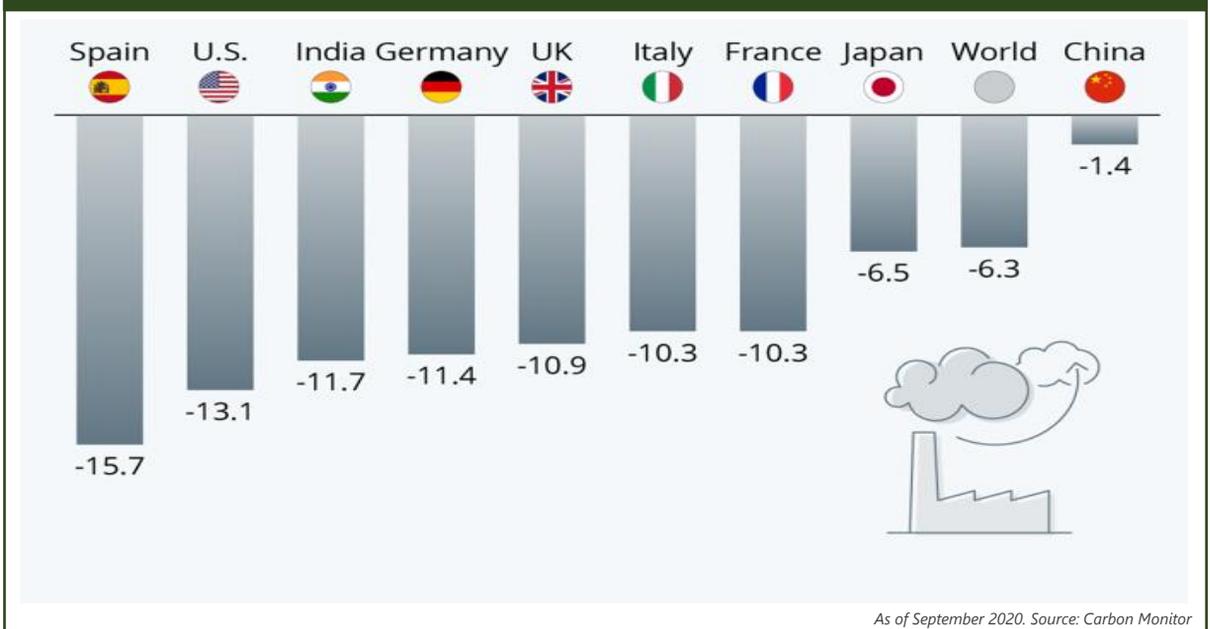
The EU intends to reduce domestic emissions by at least 40% by 2030, and to further decarbonise its economy by 2050. (EEA)

# 60%

### Global GDP

By April 2020, 44 countries and 31 provinces or cities will operate a carbon pricing scheme, representing 60% of global GDP. (World Bank)

## The Percentage Change in CO2 Emissions in 2020 Compared to 2019



## The Future of Hydrogen Energy - A Paradigm Shift

Interest in the role of hydrogen as a clean fuel is growing, and with the lowering cost of solar and wind power, hydrogen may become a big game changer in the race for green energy sources. The emergence of hydrogen as a potential high value proposition path to carbon-free economy, is observed in the number of initiatives and pioneering projects around the world.

Australia, in partnership with Japan, invested \$50 million in the world-first hydrogen supply chain pilot project. The Northern Netherlands region won a €20 million EU grant, in 2019, to become Europe's flagship green hydrogen project. Canada recently launched a Hydrogen Strategy, with an initial US\$1.17bn federal investment. Japan has ambitions to use hydrogen for creating an emissions-free transport sector. Hydrogen-powered trains are now operating in northern Germany, with plan to deliver 14 such trains to Lower Saxony by 2021. The European Marine Energy Centre recently awarded €12 million funding for developing a hydrogen power system for ferries that connect the Orkney archipelago. On the energy side, several large companies, are considering plans to lay pure hydrogen pipelines on sea bed, akin to LNG transportation overseas.

The World Economic Forum (WEF) has the view that the green hydrogen revolution that has started, won't be stopped. A Hydrogen Council, created in Davos in 2017, by a dozen Fortune 100 companies, now comprises over 40 members. The Council believes that global hydrogen consumption will increase to about 546 million tons by 2050.

### Drivers of Increasing Interest in Hydrogen

- Environmental Policy**
  - Reduce CO<sub>2</sub> emissions
  - Improve air quality
- Technology**
  - Falling costs of renewables
  - CCS developments
- Energy Independence**
  - Reduce fossil fuel imports
- Versatility**
  - Applications in all end use sectors

Source: HIS Markit

# 80%

### Reduction in Price

On average, the price of renewable energy has reduced by approximately 80% from 2010 to 2021. (The Hydrogen Council)

