Pathways to net-zero emissions

MOUNTAINS This is the world with status quo power locked in and held tightly by the currently influential.

2020 Hydrogen vehicles roll out commercially
2033 Natural gas becomes the world’s number one source of primary energy
2040 World乘用车 fleet efficiency up 50% from 2012
2055 Rail freight tonne-km 2.5 times 2010 levels
2061 Electricity decarbonised
2075 Liquid fuels eliminated from passenger road vehicles
2079 Natural gas demand surpasses the combined oil, coal and traditional biomass demand.
2100 World reaches net-zero emissions

2030 EU car fleet average (per road) 30 miles/gal
2036 Carbon price rises above $50 in over 80% of the world
2044 Solar PV passes 10,000 GW
2050 World road passenger-km reaches three times 2010’s level
2061 Global emissions fall back below 30 GtC/annum
2069 Solar PV number 1 energy source
2071 World energy demand reaches 1000 EJ
2086 Africa’s decadal energy growth exceeds Asia’s
2089 Electricity decarbonised
2100 World reaches net-zero emissions
2110

OCEANS Influence stretches far and wide in the world of Oceans. Power is devolved, competing interests are accommodated and compromise is king.

Scenarios are part of an ongoing process used in Shell for more than 40 years to challenge executives’ perspectives on the future business environment. They are based on plausible assumptions and quantification and are designed to stretch management thinking and even to consider events that may only be remotely possible.