Germany Utilities: German climate plan - a template for the rest of the world?

Germany: A plan to achieve net zero emissions by 2050. The German

government presented a >€50bn plan to tackle climate change. Germany is targeting a 55% emissions reduction by 2030 (vs 1990) and aspires to reach net zero carbon emissions by 2050. We see this as a pioneering plan, which could be followed by a wider EU Plan, which in turn could act as a blueprint for the rest of the world. In particular, the plan encourages: (i) the acceleration in the development of wind/solar, (ii) a clear path to phase out coal/lignite, and (iii) a change in consumer behavior through the combination of fiscal incentives and carbon taxes in mobility & heating.

More renewables, less coal: 65% RES production by 2030. The plan requires Germany to reach a 65% renewable share in electricity production by 2030 vs c.40% currently. This implies €70-80bn of cumulative investments in renewables over the coming decade, and implies c.8GW of capacity additions pa. At the same time, the path to decommission coal/lignite proposed by the Coal Commission on Friday was reconfirmed: c.30% of these plants (12.5GW out of 43GW) could shut by 2022, with c.30% (13.5GW) gradually closing by 2030 and the remaining c.17GW being phased out by 2038. As yet, we saw no comments on compensation for lignite closures, but the government hopes to finalise the phase out plan by November.

Carbon taxes to steer behavior and reach net zero emissions. To engender emissions abatement in non-energy sectors, the government is planning to introduce national carbon prices in transport and heating (as these industries are outside the EU ETS), an extension of subsidies on electric vehicles while fostering the construction of a network of c.1mn charging stations, VAT increases on domestic flights (and a reduction in VAT on train tickets), and incentives to support the domestic production of batteries and renewable hydrogen.

Stock implications: 30 years of growth. <u>As previously stated</u>, we believe the companies we've defined as "Climate Champions" will experience unprecedented growth rates to 2030 (we estimate 9%-12% EPS CAGR) thanks to the development of renewables and a gradual upgrade in power grids. We think the combination of (i) the rising centrality of climate policies and (ii) the improved economics in wind/solar (which no longer require subsidies: costs have dropped by 60-85% since 2010) is likely to support 30 years of growth for the most exposed Utilities. We are Buy rated on RWE (on CL), Orsted, EDP, EDPR, Enel, SSE and Iberdrola.

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Key charts of the German climate plan

Exhibit 1: With its new climate plan, Germany commits to reaching net zero emissions by 2050

Germany GHG emission reduction targets (mtCO2e)

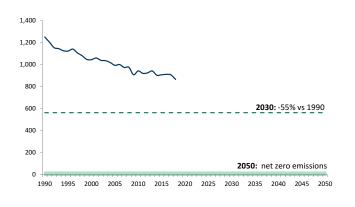
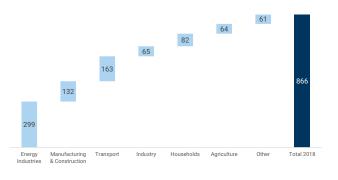
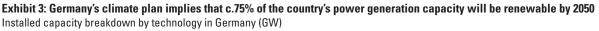


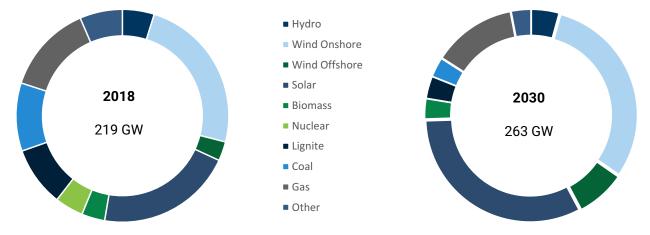
Exhibit 2: Germany's new policies target emission abatement in non-energy, non-ETS sectors like road transport and heating Germany 2018 GHG emissions breakdown (mtC02e)



Source: UBA, Goldman Sachs Global Investment Research

Source: UBA, Clean Energy Wire, Goldman Sachs Global Investment Research





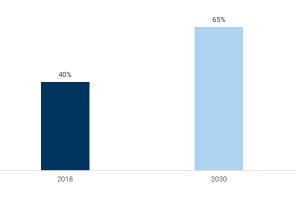
Source: BNetzA, Goldman Sachs Global Investment Research

0GW

2038

Exhibit 4: According to the plan, Germany is to achieve 65% production from RES sources by 2030

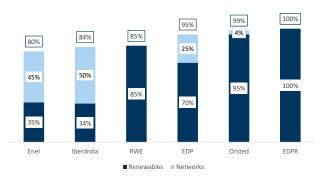
Percentage of production in Germany from renewable sources (%)



Source: Data compiled by Goldman Sachs Global Investment Research

Exhibit 6: The "Climate Champions" have 80%-100% of EBITDA exposed to Renewables and Networks

EBITDA coming from infrastructure activities as % of total, 2030E



Source: Goldman Sachs Global Investment Research

Source: Data compiled by Goldman Sachs Global Investment Research

31GW

2022

Exhibit 7: Annual wind and solar additions could accelerate from c.150GW currently to up to 400GW by 2050E

17GW

2030

Exhibit 5: Germany confirmed its plans to phase out all coal and

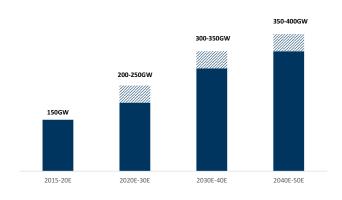
Germany coal/lignite closure evolution (GW)

lignite by 2038

43GW

2018

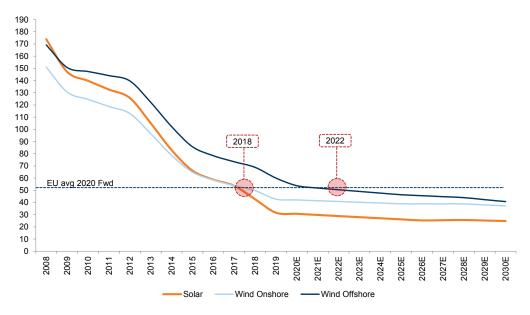
Global annual wind and solar additions, average run rate by decade (GW)



Source: IEA, Goldman Sachs Global Investment Research

Exhibit 8: Renewables: Deeply in the money over the coming years

Solar, onshore and offshore LCOEs (GSe) vs European forward power prices (€/MWh)



Source: Bloomberg, Goldman Sachs Global Investment Research

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Reg AC

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