

Renewable energy

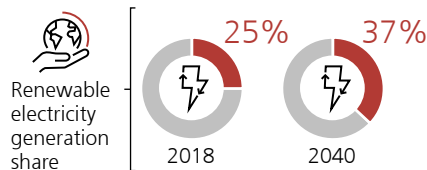
Longer Term Investments (LTI)

We believe the interaction of the following factors will make it increasingly compelling to invest in renewable energies: A) increasing urbanization and population growth which will lead to higher electricity demand, B) technological progress with relative cost advantages for renewable energies, and C) improved regulatory environment (social / political support).

Projections and opportunities

Renewable energy growth

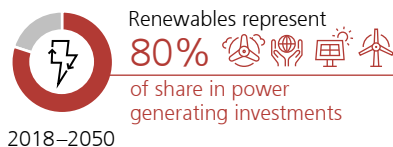
The renewable share in electricity generation is expected to equal 37% by 2040, which compares to today's figure of 25%.



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Energy investments

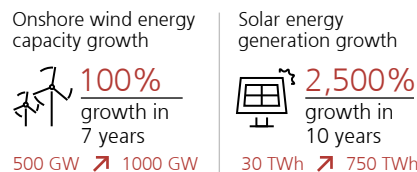
Renewables will represent 80% of the entire share of investments in power generating capacity from today to 2050.



Source: Citi, Bloomberg New Energy Finance (BNEF), UBS

Solar and Wind

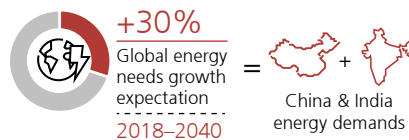
By 2025, total onshore wind capacity is projected to reach 1000 GW from today's 500 GW. Meanwhile, electricity generation from solar is expected to reach 750 TWh by 2020, a number which was 30 TWh in 2010.



Source: Goldman Sachs Global Investment Research (GS), UBS

Energy needs

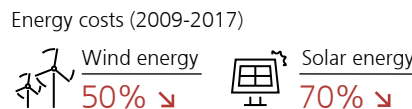
Global energy needs are expected to grow by 30% between today and 2040 - this is equivalent to adding another China and India to today's demand.



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Falling prices in energy cost

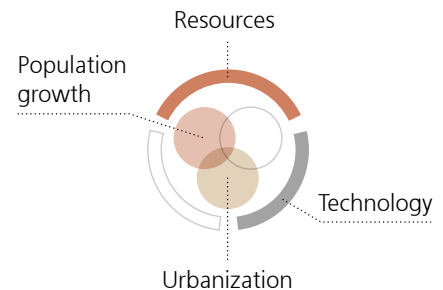
Between 2009 and 2017, the energy costs of wind and solar dropped by 50% and 70%, respectively.



Source: Goldman Sachs Global Investment Research (GS), UBS



Renewable energy investment properties



○ Influencer ⊗ Key drivers

Near-term drivers

- Falling Costs
- Technological Progress
- Political and regulatory support

Sustainable investing impact

- Renewable energy project developers
- Wind turbine
- Solar PV manufacturers
- Utilities

Impact investing (UN SDGs)

- SDG 7: Affordable and clean energy
- SDG 13: Climate action

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