Financing Energy Efficiency & Clean Energy

G20 Financing Energy Efficiency, Innovation and Clean Technology Summit

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June 12, 2019
BNEF solution

BNEF: strategies for a cleaner future

Advanced transport

- Electrified transport
- Mobility services
- Connected & autonomous vehicles

Impact on transport
Impact on oil & power

Commodities

- Carbon
- Power markets
- Oil & products
- Gas & LNG
- Chemicals
- Metals

Policy Economics & forecasts
Sustainability Innovation & tech
Finance

Clean energy

- Solar
- Wind
- Storage
- Decentralized energy

Digital industry

- IoT technologies & platforms
- Advanced analytics & automation

Digital business model evolution
Digitalization of energy, industry

Advanced materials

- 3D printing & green manufacturing
- Sustainable materials & circular economy

Composites, bioplastics & new materials
Impact on industrials, utilities & manufacturing

Source: BloombergNEF

June 12, 2019
Clean energy investment grows
Wind and solar generation costs are falling significantly

Levelised cost of energy
$350 dollars per megawatt-hour

Learning rates:
- Photovoltaic: 28%
- Onshore wind: 11%

Source: BloombergNEF. Note: Nominal dollars.
Global power demand is growing

Power demand grows in non-OECD countries

Source: BloombergNEF

Power demand by country

Source: BloombergNEF
AC demand is increasing too

AC demand will be 13% of total electricity demand in 2050

AC ownership grows as GDP/capita rises

Source: BloombergNEF
Wind and solar will be half by 2050

Historical world power generation mix vs. NEO2018 power generation mix

- 48% solar and wind
- 64% renewables
- 29% fossil fuels

Source: BloombergNEF New Energy Outlook 2018, IEA
1/3 will have rooftop PV in Brazil, Australia by 2050

Source: BloombergNEF
Emissions peak in 2027 but will not reach 2 degree pathway

Global power sector CO2 emissions (MtCO2)

Source: BloombergNEF
The world’s biggest asset manager sees sustainable investing as “a core component”

$6.52 trillion
Assets under management 1Q 2019

Sustainable investing will be a core component for how everyone invests in the future. We are only at the early stages.

Larry Fink
Chairman and Chief Executive
October 2018

Source: Financial Times link
Sustainable debt finance has been growing

$bn

Source: BloombergNEF. Available through our Sustainable Debt Tool (web | terminal). Note: as of June 3, 2019
Questions to consider
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- What are the case studies to demonstrate innovative financing solutions in the area of energy efficiency and clean energy?
Questions to consider

● To scale up, how can we apply these case studies to other countries and industries?

● How can we increase investments into energy efficiency and clean energy? – motivations, benefits, drivers and risks
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● How can we increase investments into energy efficiency and clean energy? – motivations, benefits, drivers and risks
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