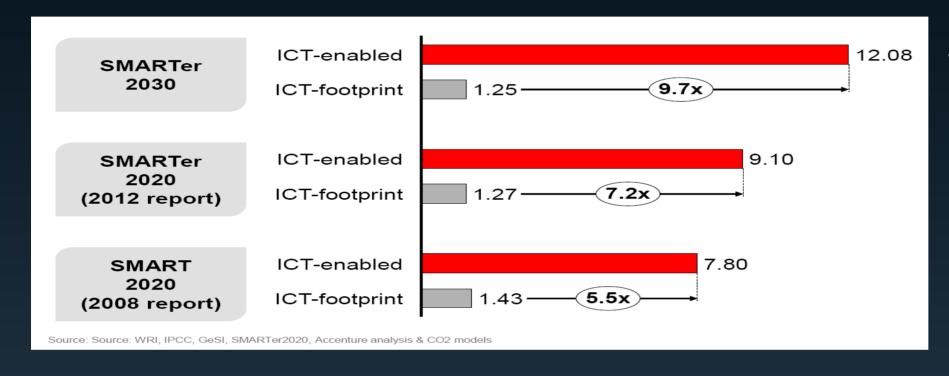


# New ICT, New Momentum of Smart Evolution

#### **Greener and Smarter Applications**





1.97% of global emission

2.3% of global emission

2.7% of global emission



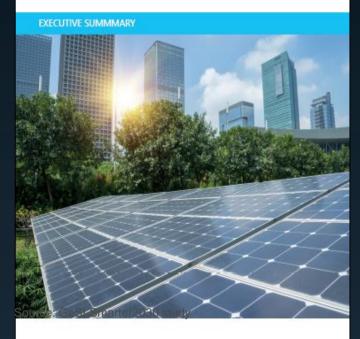
### **Enabling Potential of ICT.**







- ICT has the potential to enable a 20% reduction in CO<sub>2e</sub> by 2030, maintaining global emissions at 2015 levels
- At the same time, ICT can reduce the consumption of scarce resources





ICT could connect 2.5bn previously unconnected people to ICT services by 2030, enabling a total of

- 1.6 billion people connected to e-health
- 0.5 billion e-learning participants



ICT is good for growth and efficiency, enabling 10.1 trillion EUR in business value from sustainability

- 5.8 trillion EUR in new revenues in 2030 (of this, 1,8 trillion EUR for the ICT sector)
- 4.3 trillion EUR in cost savings





# ICT Enables Digital Economy Transformation and Is HUAWEI Pivotal to National Competitiveness

#### **National Digital Economy Transformation**







Digital Malaysia

#### ICT Drives Economic Transformation

- A 10% improvement in mobile broadband penetration will increase GDP by 1.4% and productivity by 0.7%–4.2%.
- The potential overall economic impact of IoT could be as high as 11% of the global economy.
- A 20% growth in ICT investment will increase a country's GDP by 1%.

Source: World Bank\McKinsey\Huawei GC

#### **Industry Modernization & Transformation Strategies**



Industry 4.0



**AMP 2.0** 



Made in China 2025

#### 50+ Carriers Have Announced Gigabit Services



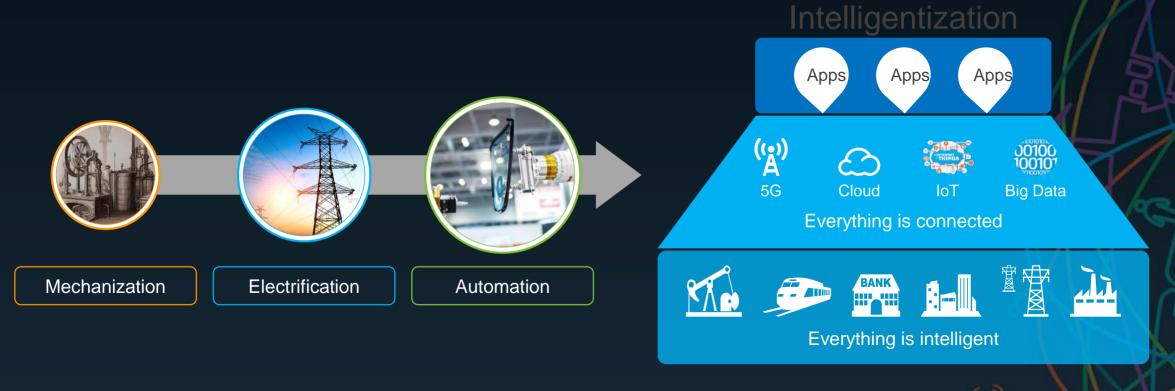
In 2015, FCC changed the definition of broadband by increasing minimum download speeds from 4 Mbit/s to 25Mbit/s.



In 2015, Ofcom changed the definition of ultrafast speed from 100 Mbit/s+ to 300 Mbit/s+.

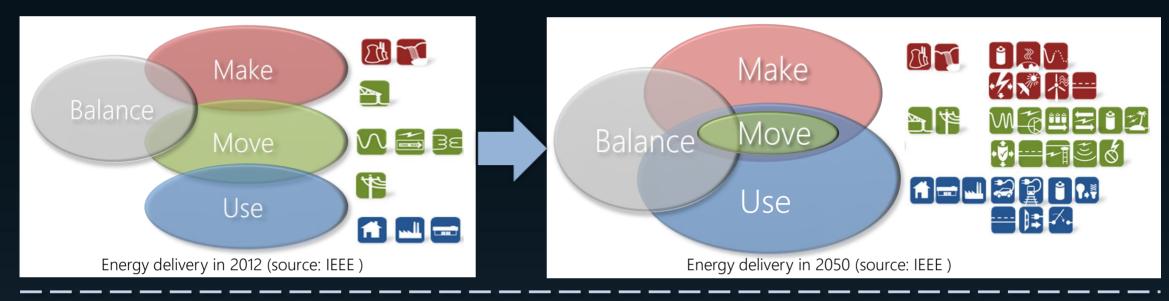
# ICT Is Enabling the Fourth Industrial Revolution – Intelligentization





- Following mechanization, electrification, and automation, we are now standing on the threshold of the fourth industrial revolution – intelligentization. Intelligence will be embedded into everything, including business processes.
- ICT technologies such as mobility, cloud, Big Data, and IoT will form the foundation of intelligentization.

#### **Smart Grid Evolution Needs ICT Innovation**









#### **New Technologies Break AMI Application Bottleneck**

# Broadband PLC: Operation Cost ↓ 30%



#### >99.5% daily success rate;

Data rate 20x higher than legacy PLC;

- ① Terminal online: 1day → 5min;
- ② Online upgrade: 10min → 10s;
- 3 Real time line loss analysis and anti-tampering;

### Wireless IOT: IOT Oriented Architecture



- 10km coverage/cell;
- 100k terminals/cell;
- Sub-GHz unlicensed spectrum;
- Millions of terminals access;
- (2) IOT with 3GPP standard;
- 3 Low cost of deployment and maintenance:
- \* NB-IOT: Narrow Band Internet of Things

## Open Architecture: Flexibility and Compatibility



- ① Compliant with DLMS, ANSI, etc.;
- ② Business applications integration;
- ③ Industry Alliance;
- \* IOT: Internet of Things



# 2020 Target: More Efficient. Reliable & Smart





Total energy consumption

ICT main equipment energy consumption

Reduced interruption by intelligent method



75%

Network Infrastructure Energy Efficiency

Interruption \50%

# Huawei at a Glance





170+
Countries



**176,000** Employees





36
Joint innovation centers



#### Growing Recognition by Industry Customers



Governments and public sectors in

140+ countries and regions





300+ financial services institutions

160+ power companies



Best Innovation Partner for Enterprise ICT



180,000+ highways & railways (km)







large ISPs

- Cloud OS is rated as the world's best in the private cloud market
- Enterprise network and communications businesses are rated as "leaders"
- Ranked No.1 in market share growth rate for data center switches; ranked No.2 in market share for low-end access and enterprise routers
- Deployed 162 LTE industry networks,
   ranking No.1 globally

Source: Forrester, HIS, IDC





### Huawei

Customer-centric culture

Customer-specific innovation

Leading global ICT solutions provider

• USD 60 billion Revenue in 2015

· USD 6.07 billion R&D investment in 2015

Hosting 180+ important positions in standards organizations

. 36511 authorized patents

• Serving 160+ power companies worldwide



