

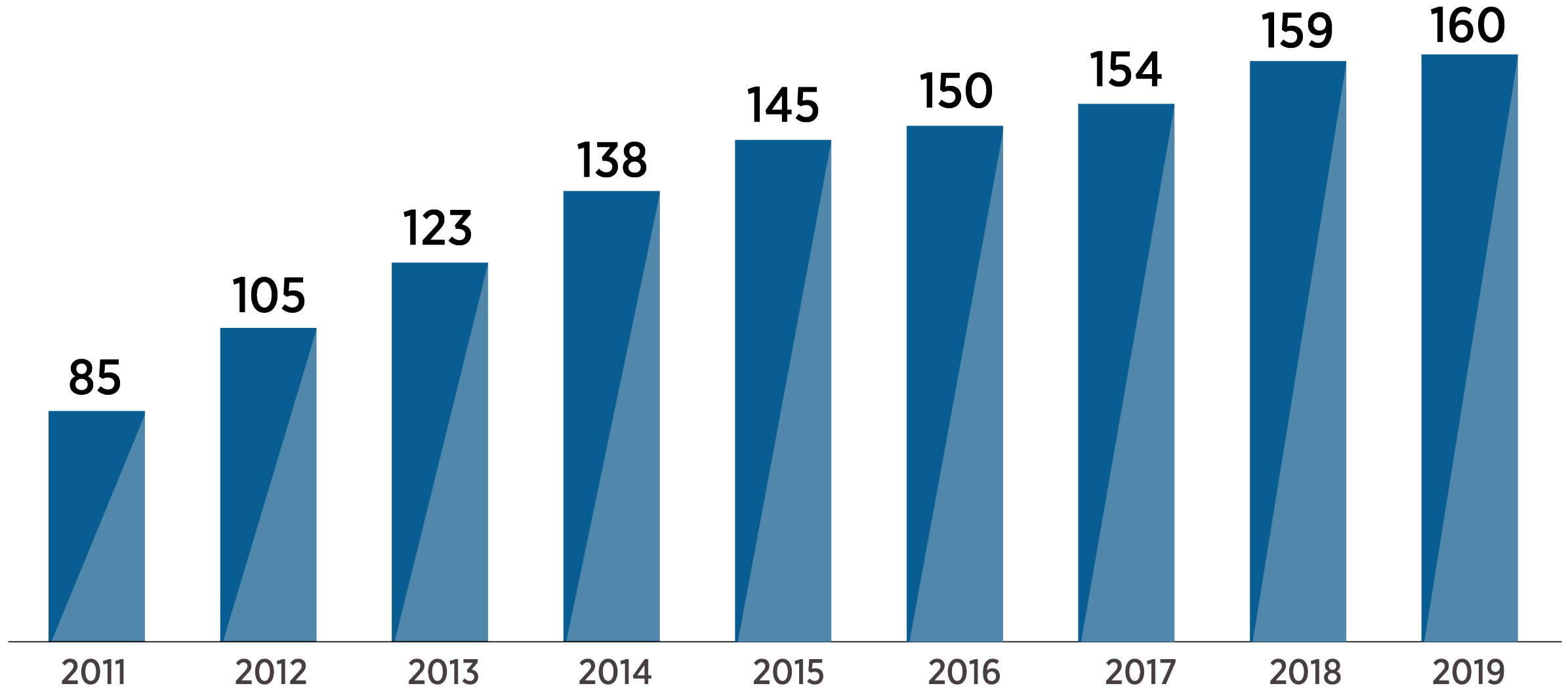
17th Meeting of the IRENA Council

Opening Remarks

Francesco La Camera
Director-General

25-26 June 2019 • Sheraton Hotel • Abu Dhabi

160 Members and 23 States in Accession



Growing Energy Demand



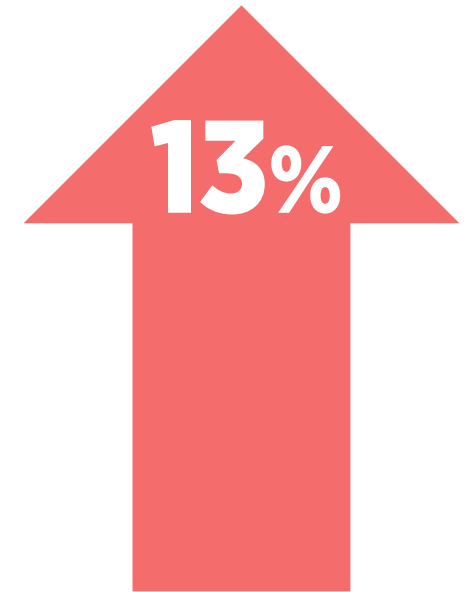
Global economy growing
at an average rate
of **3.4% per year**



Population will expand
from 7.4 billion today
to **8.5 billion in 2030**
to **9 billion in 2050**



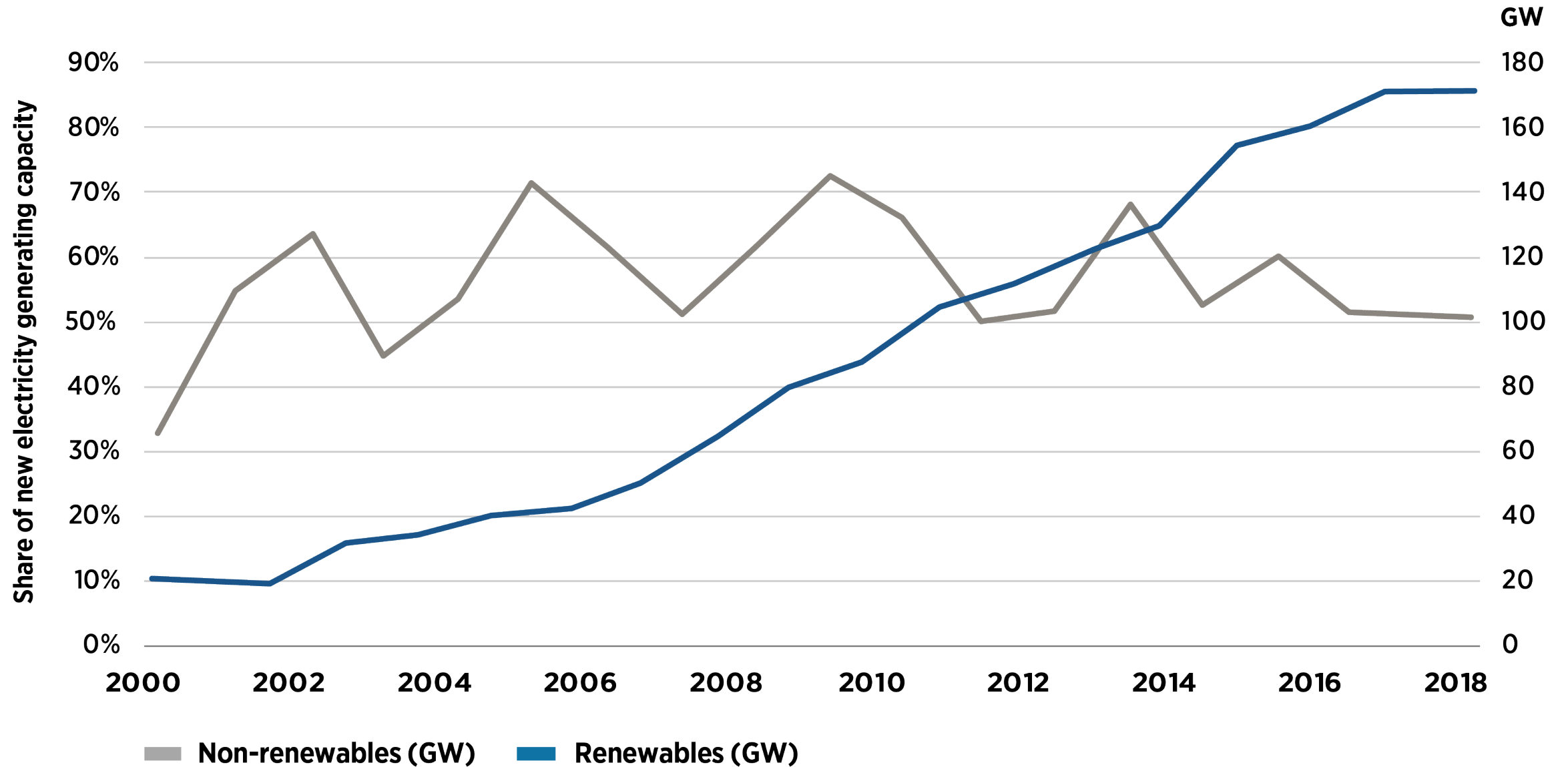
A process of urbanization
that adds a city the size of
Shanghai to the world's urban
population **every 4 months**



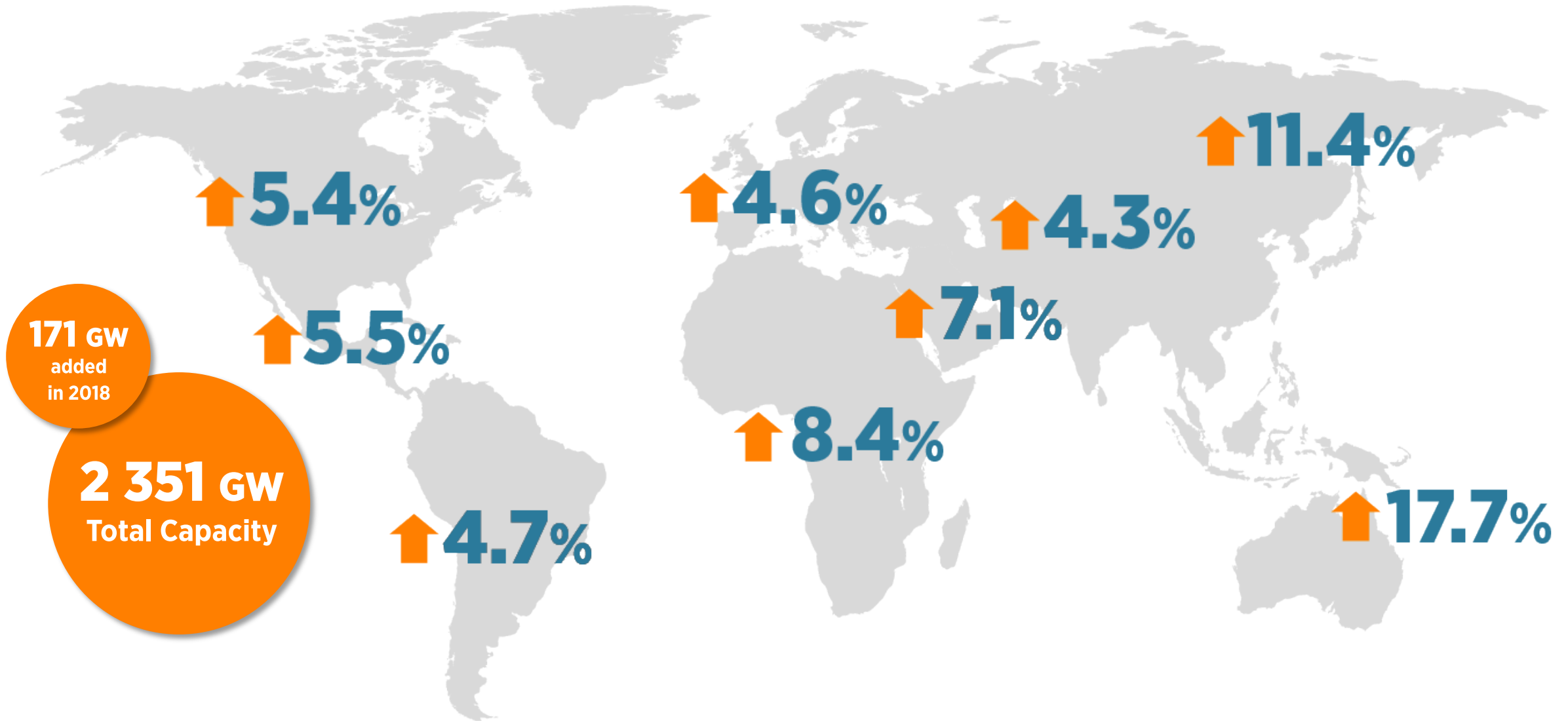
Energy demand
will grow 13%
by 2030

The Energy Transformation is Under Way

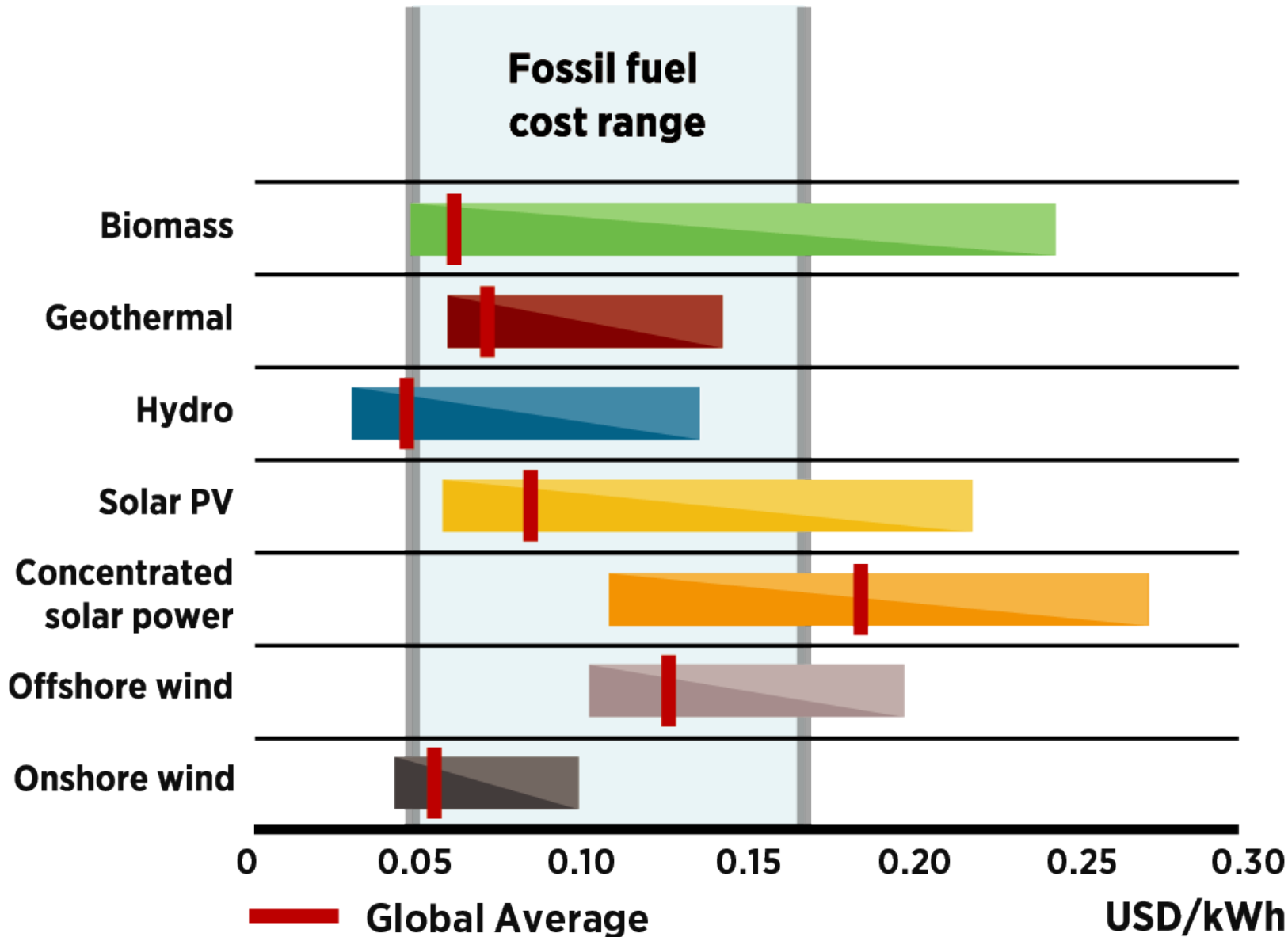
Capacity additions in power sector



Renewable energy capacity and growth in 2018



The strong business case of renewables continues to solidify



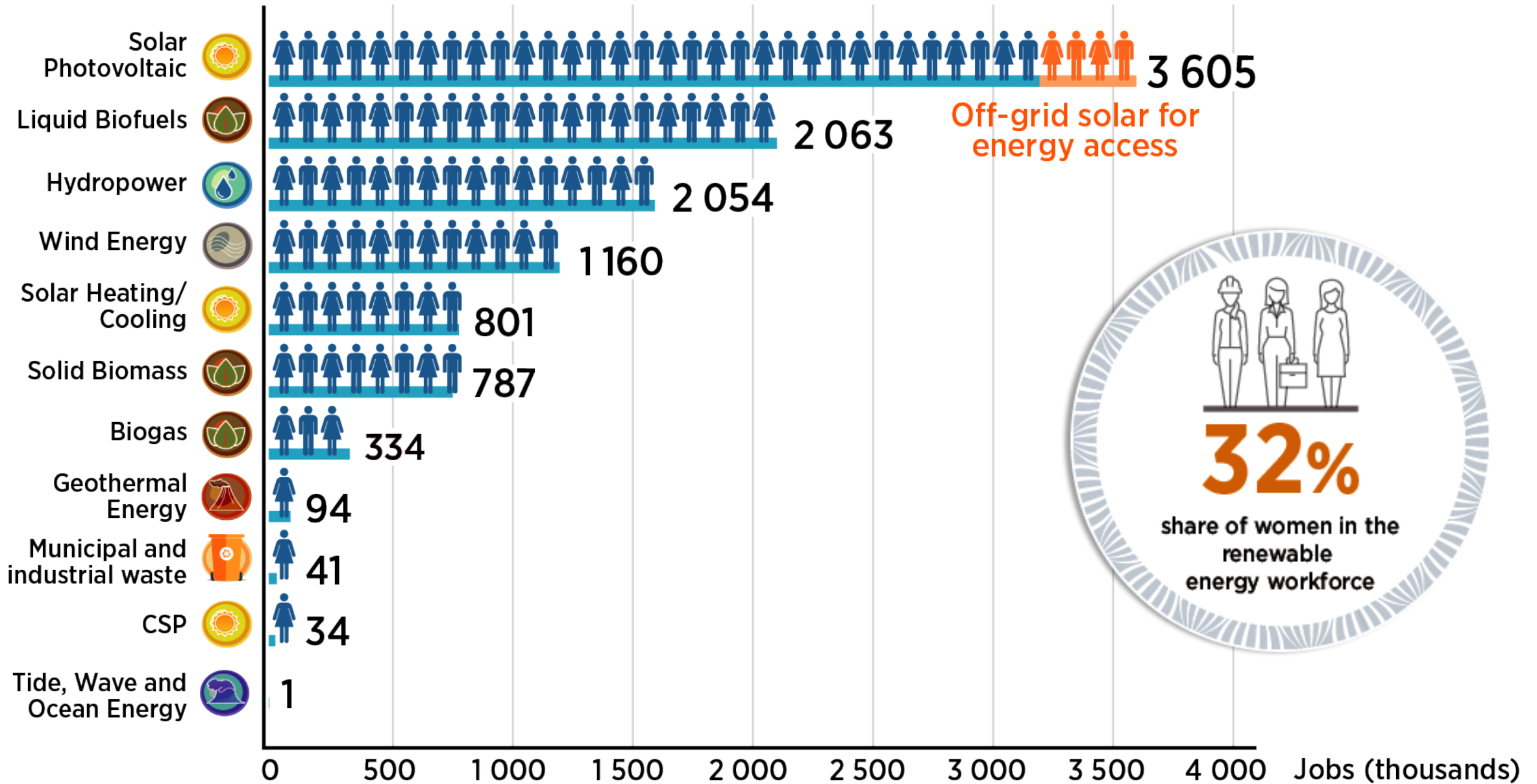
Cost of Electricity

Global levelised cost of electricity from utility-scale renewable power generation technologies (2010-2018)

Source: IRENA Renewable Cost Database

- **Bioenergy** 0.062 USD/kWh
- **Geothermal** 0.072 USD/kWh
- **Hydro** 0.047 USD/kWh
- **Onshore wind** 0.056 USD/kWh
- **Concentrated solar power** 0.185 USD/kWh
- **Solar PV** 0.085 USD/kWh
(Solar PV projects cost has fallen 77% between 2010-2018)

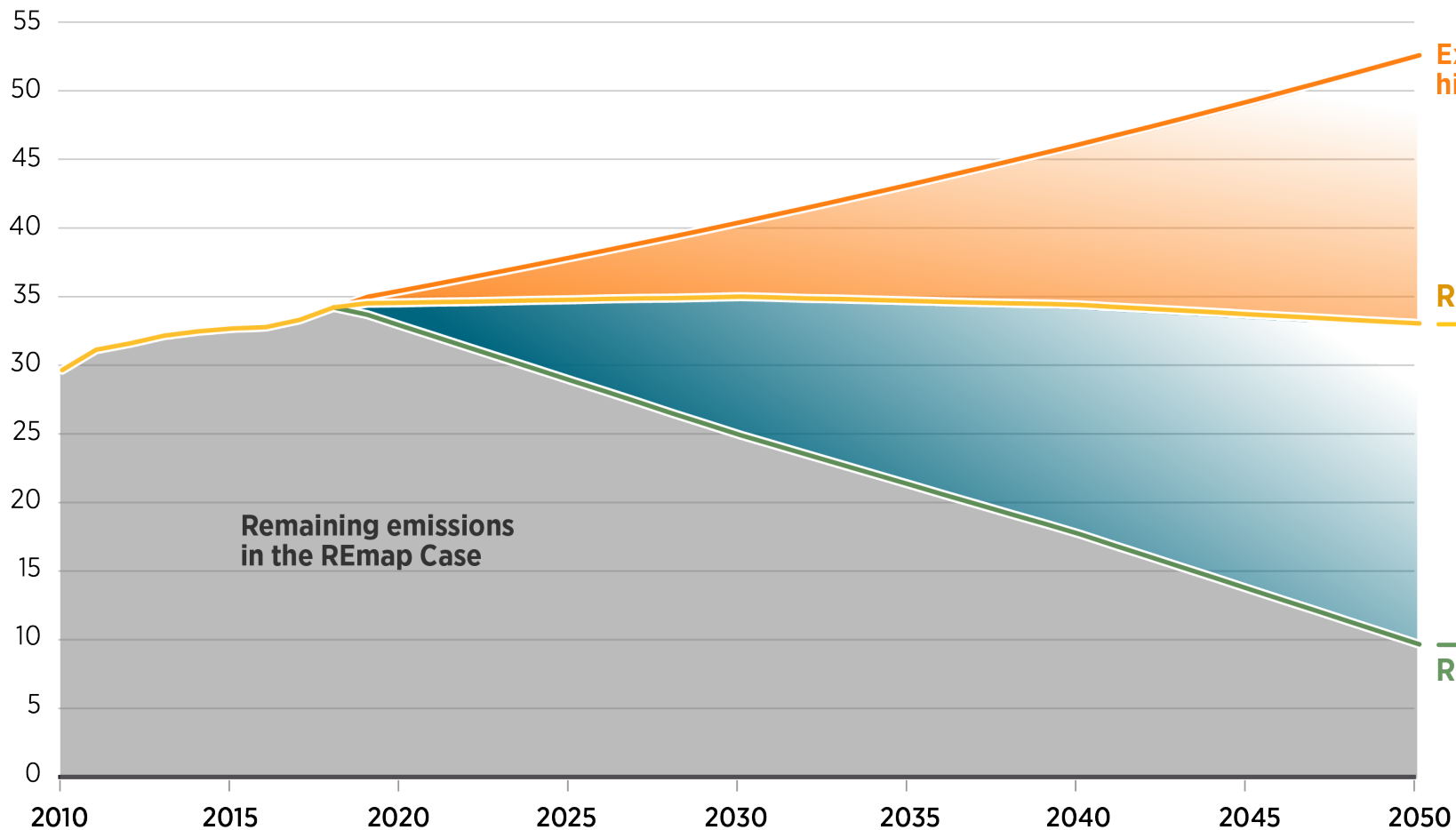
11 million jobs in renewable energy by today



The Sense of Urgency and Opportunity

Renewables & electrification can deliver 75% of energy-related CO₂ emission reductions needed

Annual energy-related CO₂ emissions, 2010-2050 (Gt/yr)



Extrapolation of recent historical trend: **53 Gt in 2050**

Reference Case: **33 Gt in 2050**

REmap Case: **9.8 Gt in 2050**

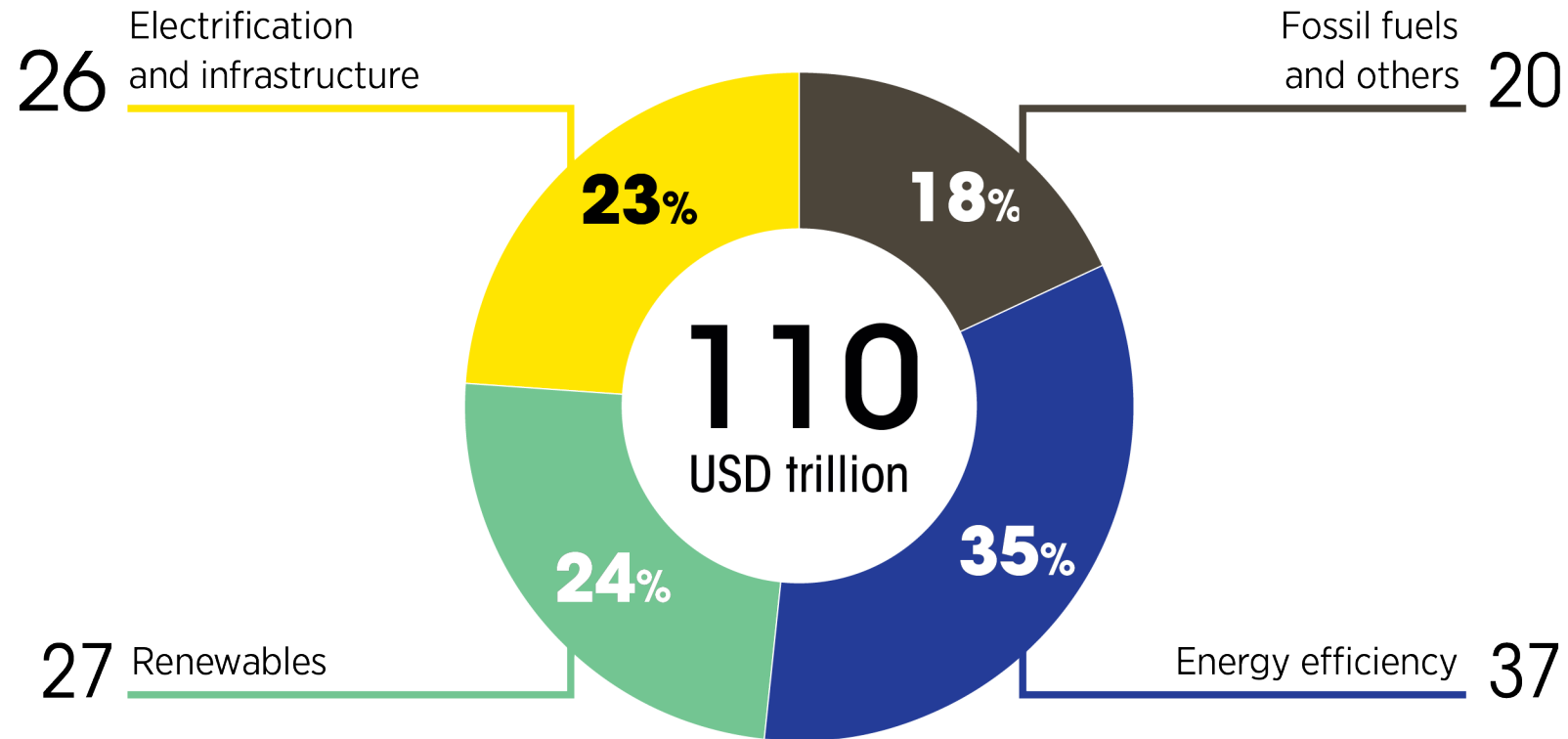
70% emission reductions resulting from the REmap Case

Electrification of heat and transport w/RE:	36%
Renewable energy:	39%
Energy efficiency and others:	25%

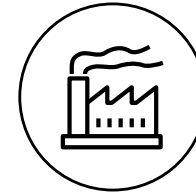
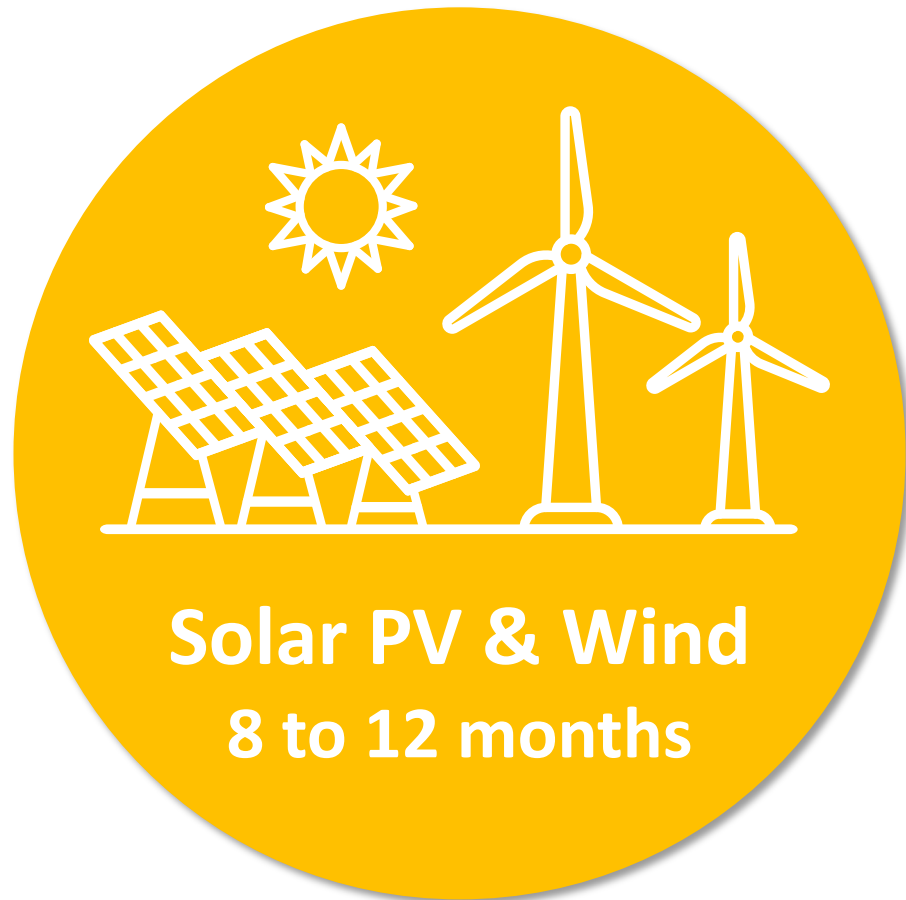
Renewable energy and electrification deliver **75%** of emission reductions

With energy efficiency included, this rises to over 90%.

REmap Case cumulative investments, 2016-2050 (USD trillion)



- USD 110 trillion needed by 2050 is equivalent to around 2% of global GDP/year over the period.
- Every dollar spent in the global energy transformation saves 3 to 7 USD.



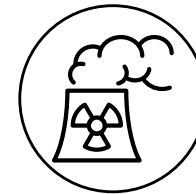
Gas

16 to 20 months (open cycle)
26 to 30 months (closed cycle)



Coal

40 to 60 months



Nuclear

80+ months



Multilateral Institutions and UN Reform

01

UNFCCC

NDC's, Long Term strategies and Markets

02

UNDP

National Coordinator and Innovation Hub

03

**IEA AND OTHER
AGENCIES**

Integration

04

**REGIONAL
ORGANISATIONS**

Link to markets and network

05

**EUROPEAN
UNION**

External Plan, ElectriFI

06

**MULTILATERAL
BANKS**

Bankable projects

شكرا لكم

谢谢

Thank you

Merci

Благодарю вас

Gracias