

# WE MO 2019



## World Energy Markets Observatory: Australia

Affordability, reliability and sustainability on the agenda

Now in its third year, the Australian edition of the **World Energy Markets Observatory (WEMO)** reveals a country with a full agenda—and competing priorities.



Country: **Australia**  
 Population: **25,180,200**  
 (December 2018)  
 GDP: **US\$1,357.59 billion**  
 (2017-2018)

**"2018 was Australia's third-warmest year on record."**

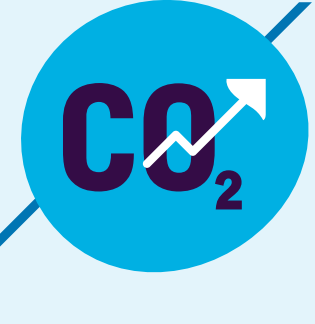
Jan Lindhaus  
 Vice President, Head of Energy & Utilities Australia  
 and  
 Anastasia Klingberg  
 Industry Practice Lead Energy & Utilities, Australia

### 1 At a glance: Renewables and environment

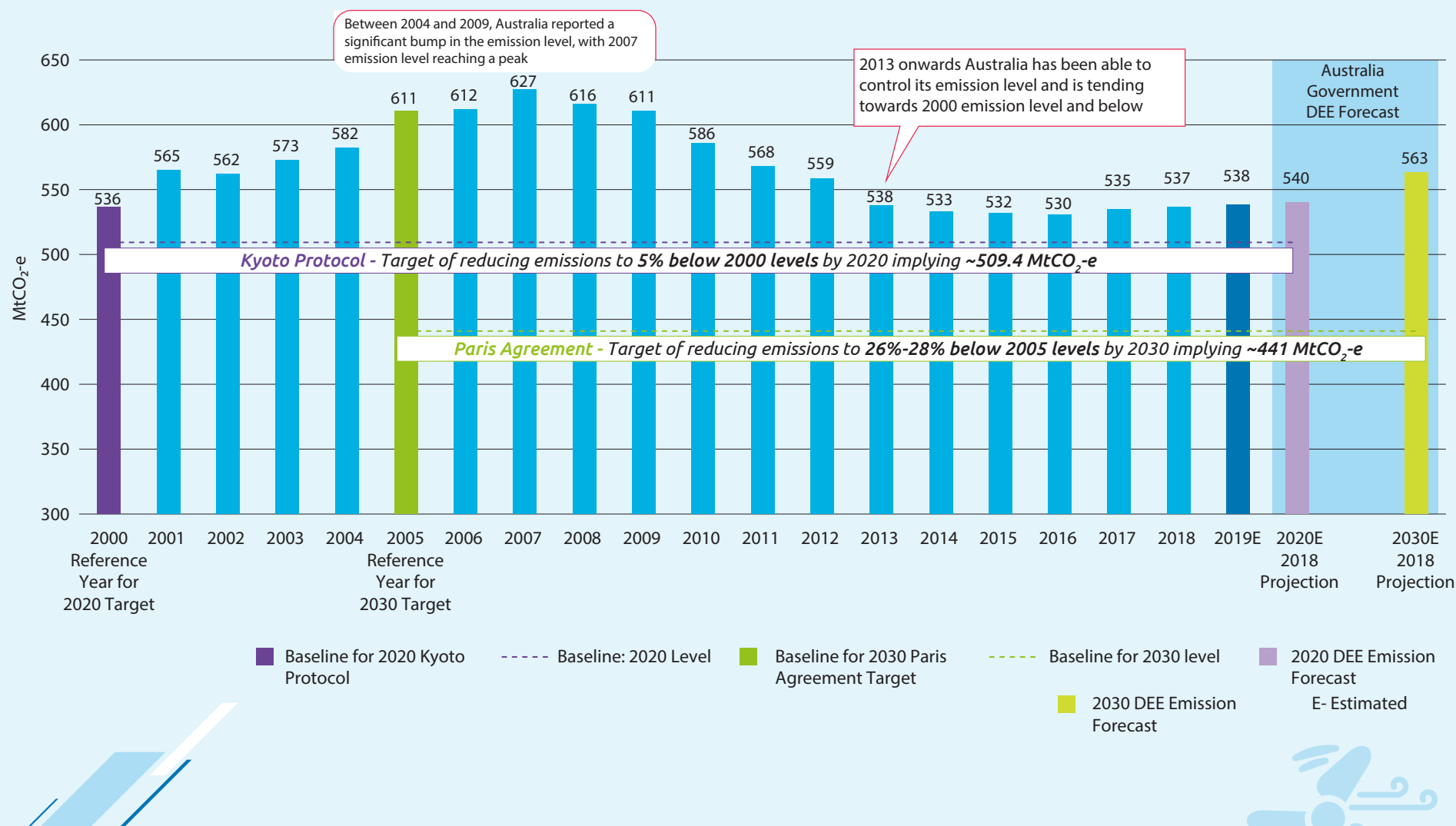


Share of renewables in final energy consumption: **7.7%**  
 Total investment in large-scale clean energy: **\$18.8B**  
 Total CO<sub>2</sub> emissions: **536.5 Mt**  
 GHG emission growth rate: **+0.7%**

### 2 Extreme weather has prompted the Australian government to focus on curbing CO<sub>2</sub> emission levels to minimize climate impact

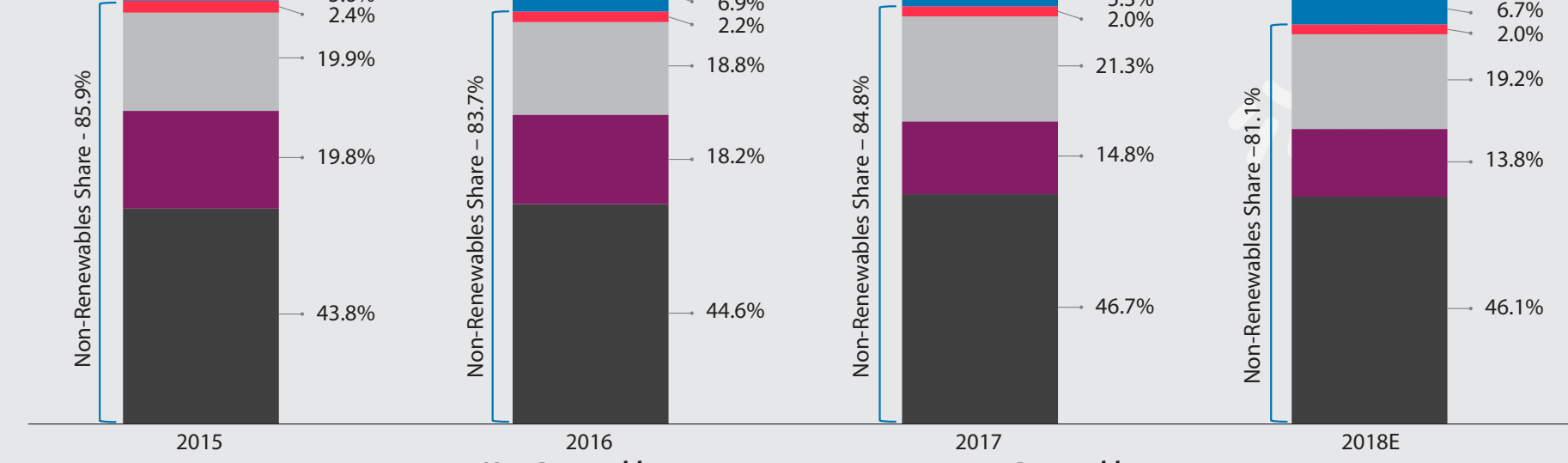


Energy-related CO<sub>2</sub> emissions evolution since 2000



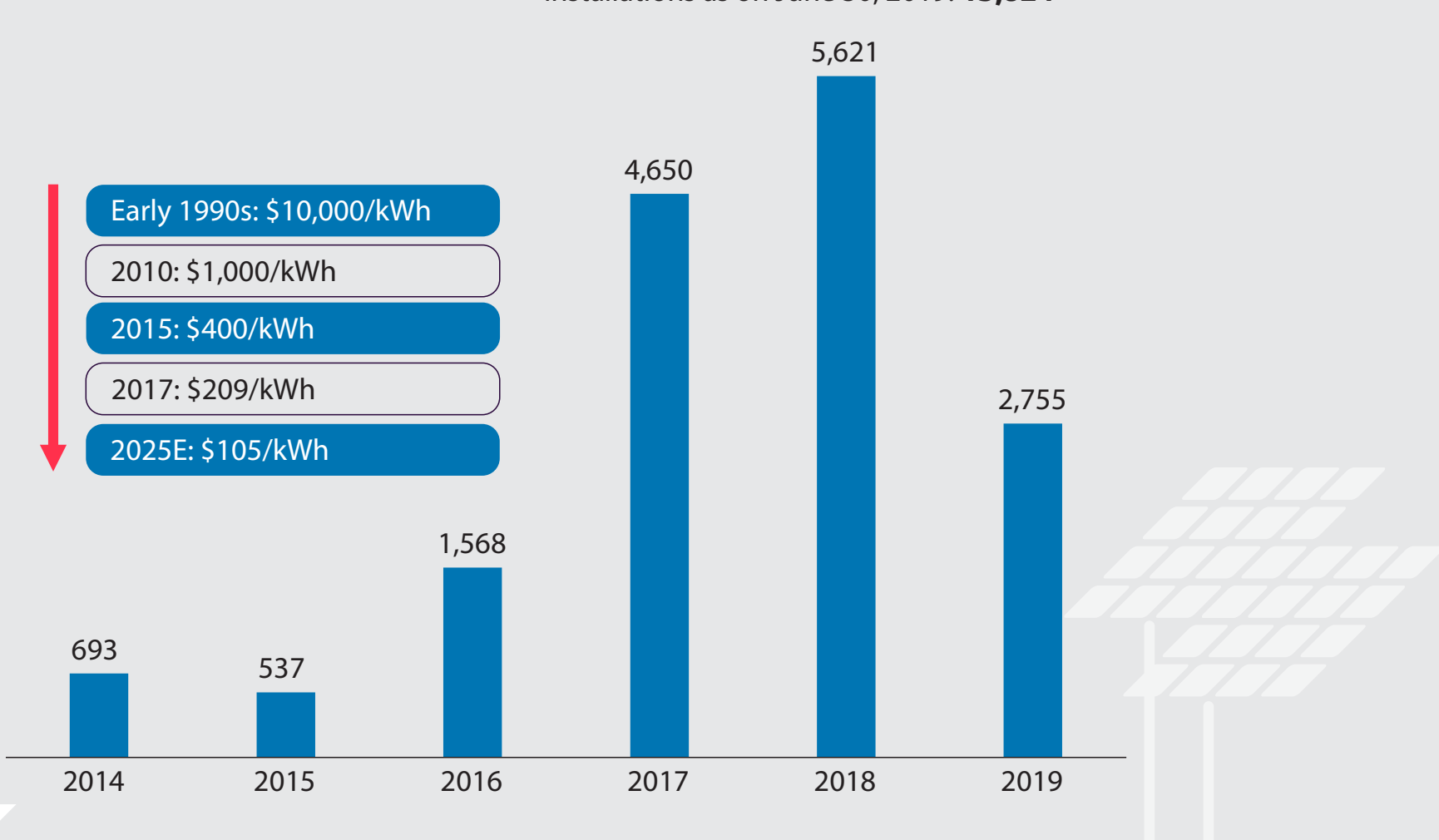
**+4%: projected emissions between 2020-30**

### 3 Coal dominates the Australian energy mix, but production has slowed due to greater awareness of harmful emissions and natural aging of plants

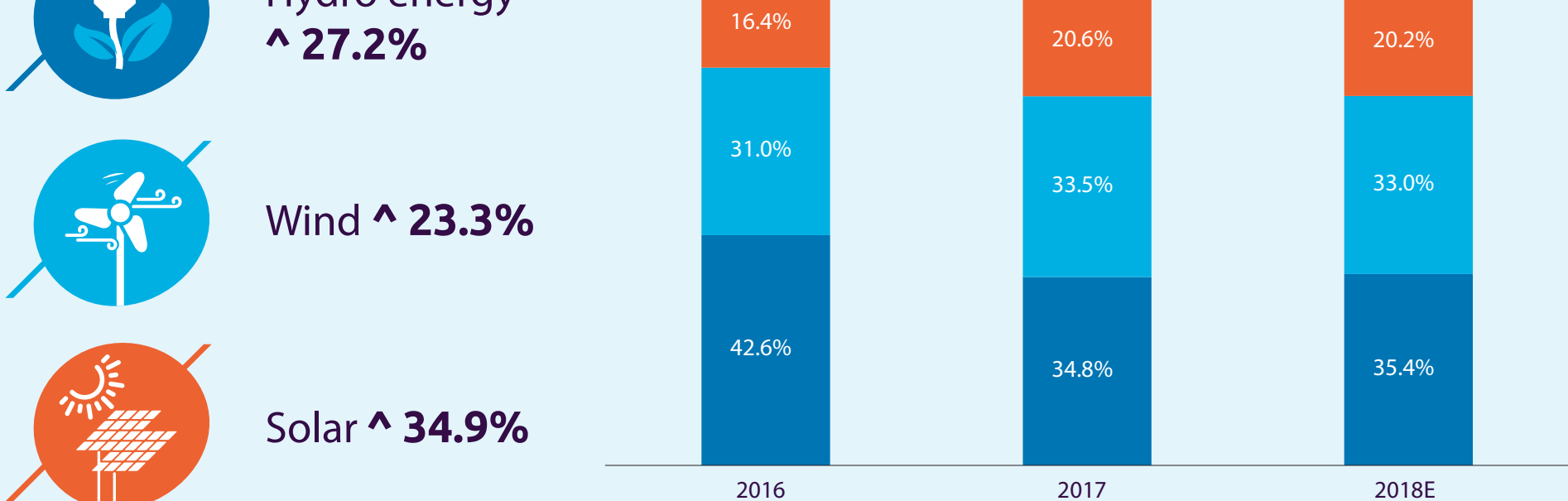


Note: The latest available data published by the Department of the Environment and Energy, Australian Energy Statistics provided Australian electricity generation, by fuel type, physical units Expected (E) numbers for 2018

Cumulative Total number of grid-connected installations as on June 30, 2019: **15,824**

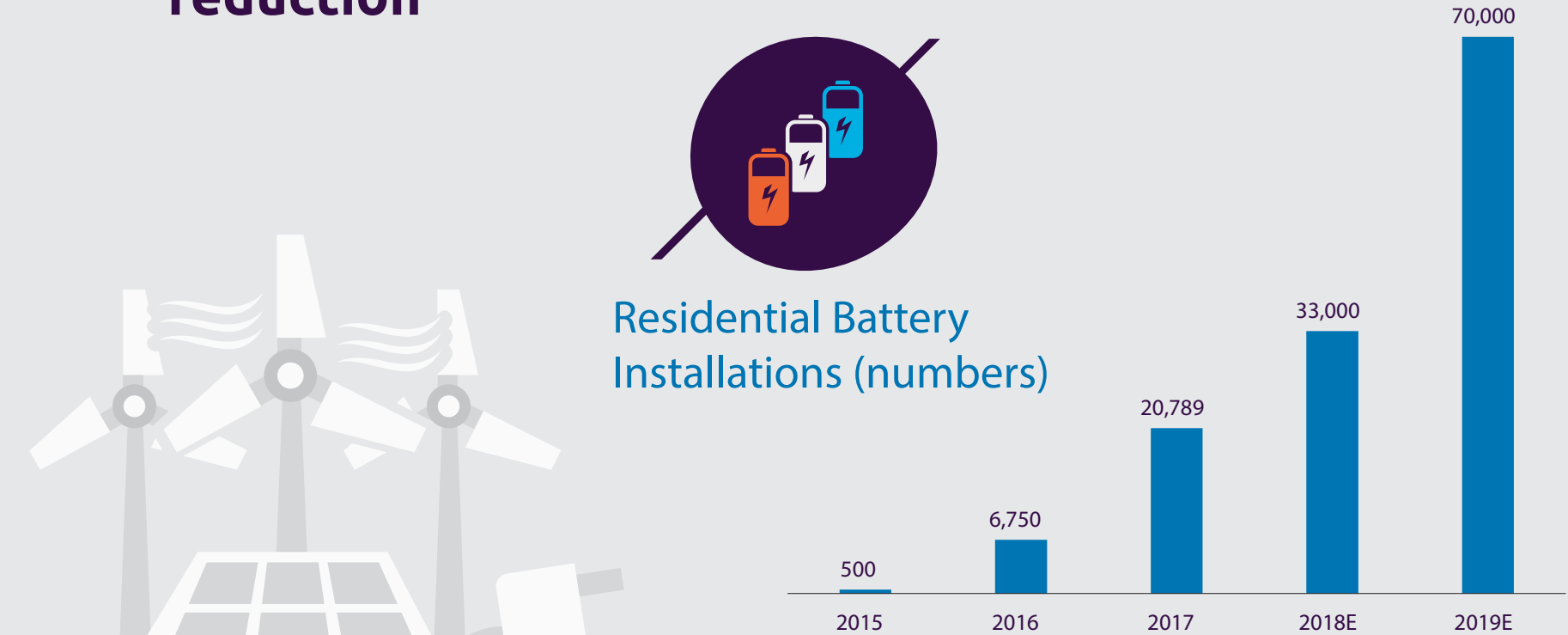


### 4 Australia has been progressively embracing clean energy, further bolstering transition efforts



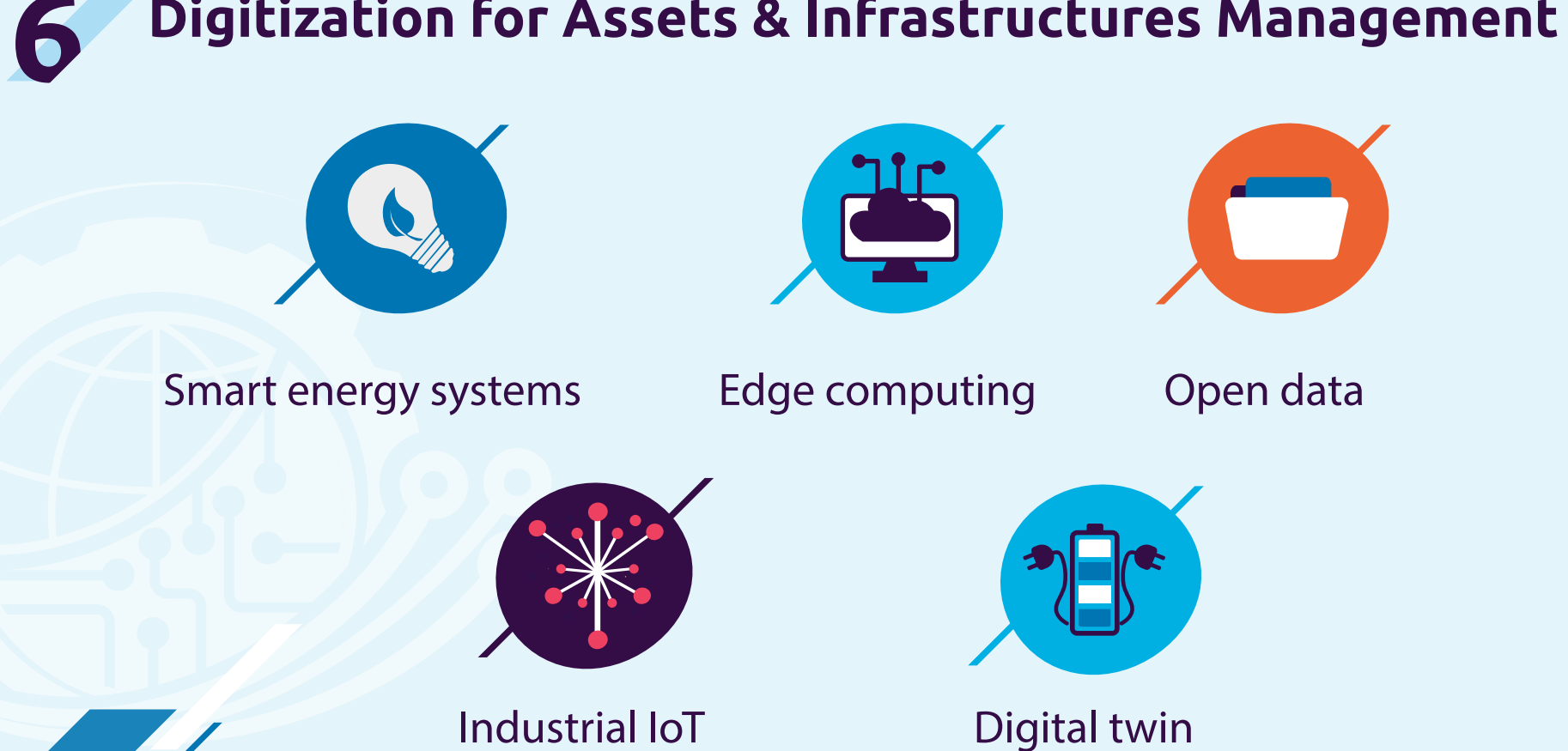
**87:** Number of large-scale renewable projects underway as of 2018  
**10M+:** Equivalent number of homes served by renewable energy  
**Renewable energy penetration ^ 2.6%** between 2016-18  
**18.9%** share of annual electricity generated by renewables

### 5 Australia is focusing on electricity storage technologies to address the 'trilemma' around energy security and reliability, affordability and emissions reduction



WEMO 2018, Sunwiz Energy Consultancy, Clean Energy Council - Energy Storage

### 6 Digitization for Assets & Infrastructures Management



#### About WEMO

The **World Energy Markets Observatory (WEMO)** is Capgemini's annual thought leadership and research report that tracks the development and transformation of electricity and gas markets in **Europe, North America, Australia, Southeast Asia, India and China**. Now in its **21st year**, WEMO examines the following topics: climate change & regulatory policies; energy transition; infrastructure & adequacy of supply; supply & final customer; transition; and financials.

For more information, please visit:

[www.capgemini.com/WEMO](http://www.capgemini.com/WEMO)