



ILLUSTRATION

CLIMATE RESILIENCE

Safeguarding Singapore's Future

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As a low-lying tropical island, Singapore is particularly vulnerable to the threat of rising sea levels. Building upon past strategies, the city-state has adopted a comprehensive plan to defend against the effects of climate change, and to support the global effort towards a low-carbon future.

Building A City In Nature

Greenery and water will be woven into the cityscape to reduce urban heat and create thermal comfort for residents, while restoring nature into the urban fabric.

More Energy-Efficient Buildings

To green 80% of buildings by 2030, the Green Mark Scheme fosters energy-efficient design such as super-low energy and net-zero energy buildings.

Reducing Vehicular Emissions

Private vehicle growth has been capped at zero since 2018. By 2040, public and shared transport and walk-cycle-ride will become the preferred travel modes.

Managing Waste Sustainably

To reduce the waste sent to landfills by 30% by 2030, the 2019 Zero Waste Masterplan and Resource Sustainability Act promote a circular approach to managing waste.

- 1 Novel photovoltaic (PV) applications—rooftop and building-integrated PV
- 2 Water saving features such as rainwater harvesting and water recycling
- 3 Smart lighting and cooling system
- 4 Centralised district-wide cooling system
- 5 5.5 km² of nature parks and 300 km of nature ways by 2030
- 6 Nature-centric neighbourhoods based on HDB's Biophilic Town Framework
- 7 Active, Beautiful and Clean Waters Programme
- 8 Promoting greater stewardship in the management of green spaces
- 9 Park Connector Network to extend to 500 km by 2030
- 10 9 in 10 peak period journeys to use walk-cycle-ride modes by 2040
- 11 Rail network to expand to 360 km by 2030
- 12 100% cleaner vehicles by 2040
- 13 70% recycling rate by 2030
- 14 Food waste segregation in commercial and industrial premises

Strengthening Food Supply

To produce 30% of nutritional needs locally by 2030, the agri-food industry will be transformed to be highly productive and climate-resilient.

Reducing Emissions From Industry

In 2019, Singapore became the first Southeast Asian nation to introduce a carbon tax. To drive decarbonisation, industries are supported to move towards environmentally sustainable production.

Diversifying Energy Sources

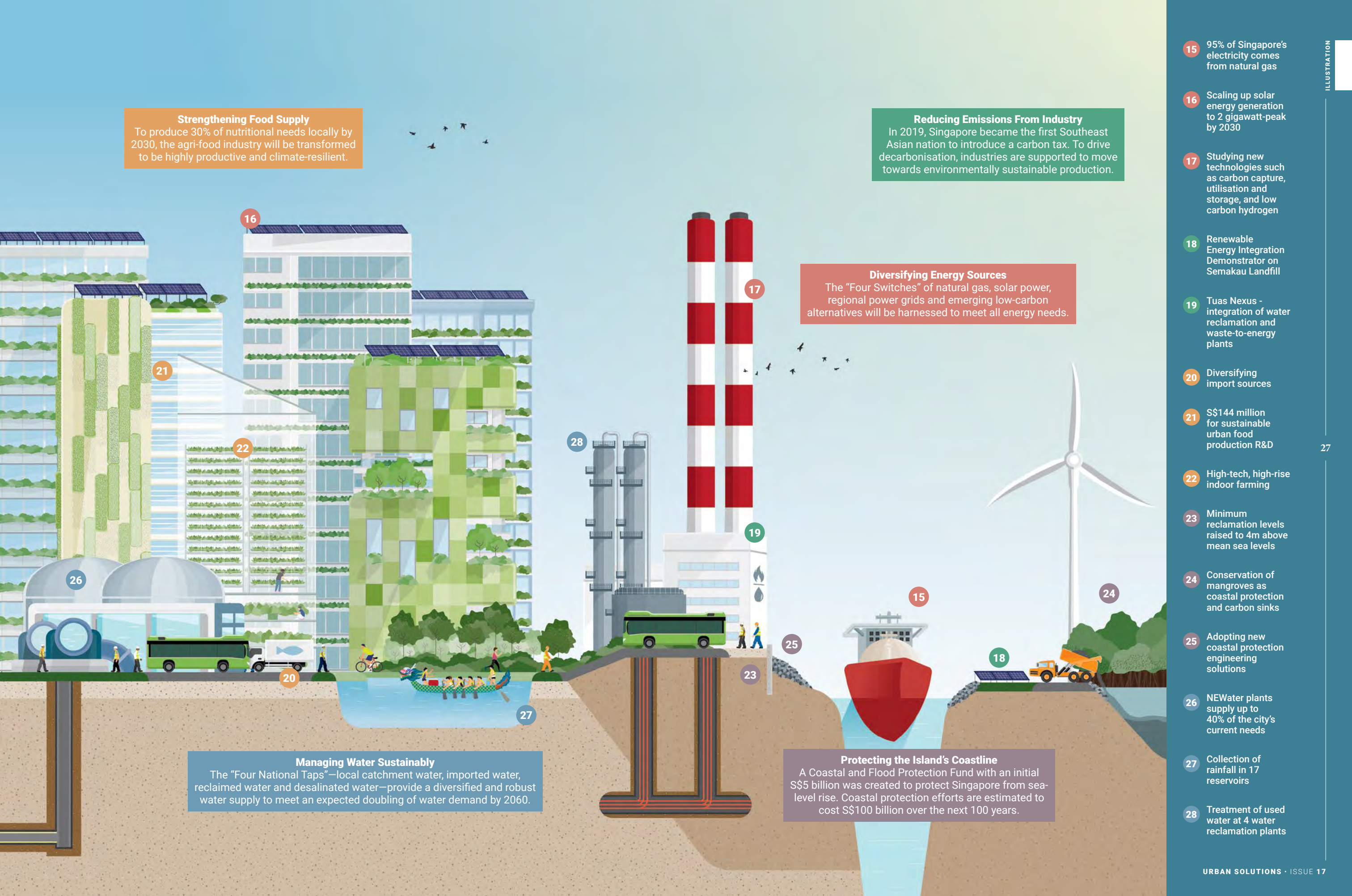
The “Four Switches” of natural gas, solar power, regional power grids and emerging low-carbon alternatives will be harnessed to meet all energy needs.

Managing Water Sustainably

The “Four National Taps”—local catchment water, imported water, reclaimed water and desalinated water—provide a diversified and robust water supply to meet an expected doubling of water demand by 2060.

Protecting the Island’s Coastline

A Coastal and Flood Protection Fund with an initial S\$5 billion was created to protect Singapore from sea-level rise. Coastal protection efforts are estimated to cost S\$100 billion over the next 100 years.



- 15 95% of Singapore’s electricity comes from natural gas
- 16 Scaling up solar energy generation to 2 gigawatt-peak by 2030
- 17 Studying new technologies such as carbon capture, utilisation and storage, and low carbon hydrogen
- 18 Renewable Energy Integration Demonstrator on Semakau Landfill
- 19 Tuas Nexus - integration of water reclamation and waste-to-energy plants
- 20 Diversifying import sources
- 21 S\$144 million for sustainable urban food production R&D
- 22 High-tech, high-rise indoor farming
- 23 Minimum reclamation levels raised to 4m above mean sea levels
- 24 Conservation of mangroves as coastal protection and carbon sinks
- 25 Adopting new coastal protection engineering solutions
- 26 NEWater plants supply up to 40% of the city’s current needs
- 27 Collection of rainfall in 17 reservoirs
- 28 Treatment of used water at 4 water reclamation plants