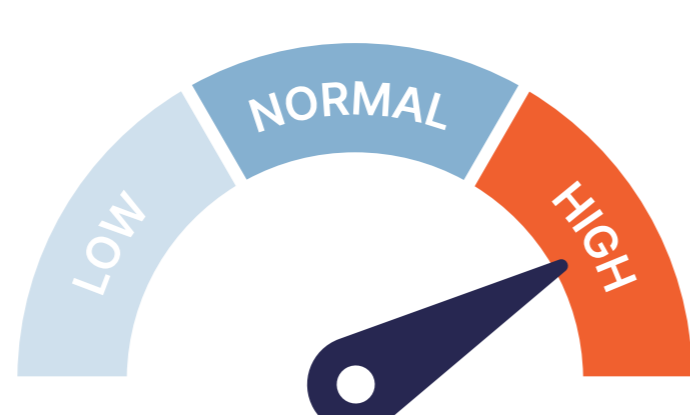


# HOW DOES THERMAL ENERGY STORAGE SYSTEM SUPPORT DEMAND RESPONSE?

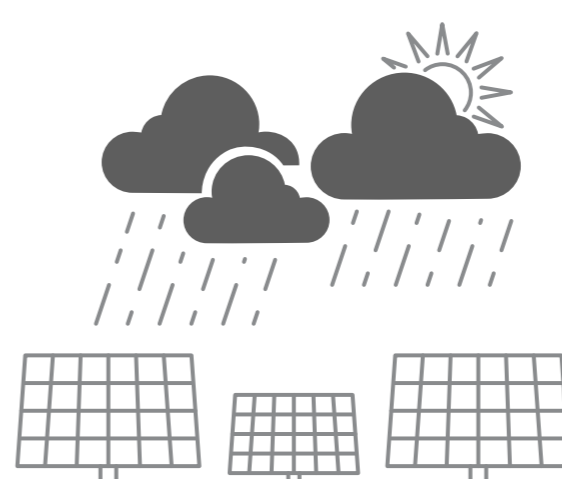
## What is Demand Response?

It is a programme that enables electricity customers to voluntarily reduce or shift their electricity consumption, thereby balancing the nation's supply and demand and contributing to grid stability and resilience.

## When is Demand Response Required?



Electricity **Demand High**  
in Singapore is **High**

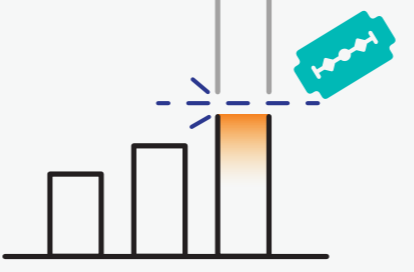


**Adverse Weather**  
conditions impact the generation of renewable energy sources such as solar power


## Benefits of Demand Response



**FACILITATES** the integration of more renewable energy sources by helping to address supply intermittency



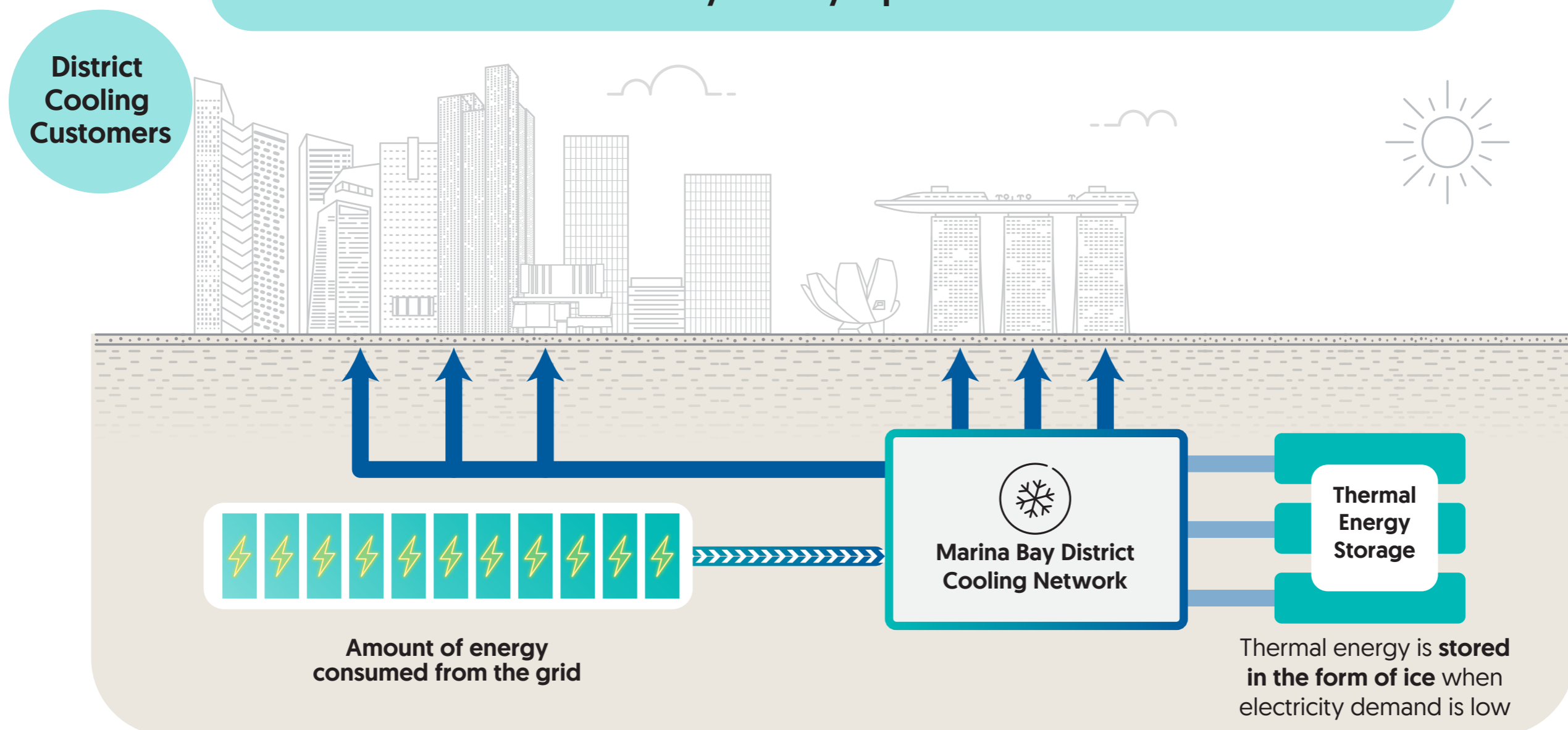
**REDUCES** peak load demand in times of peak electricity usage



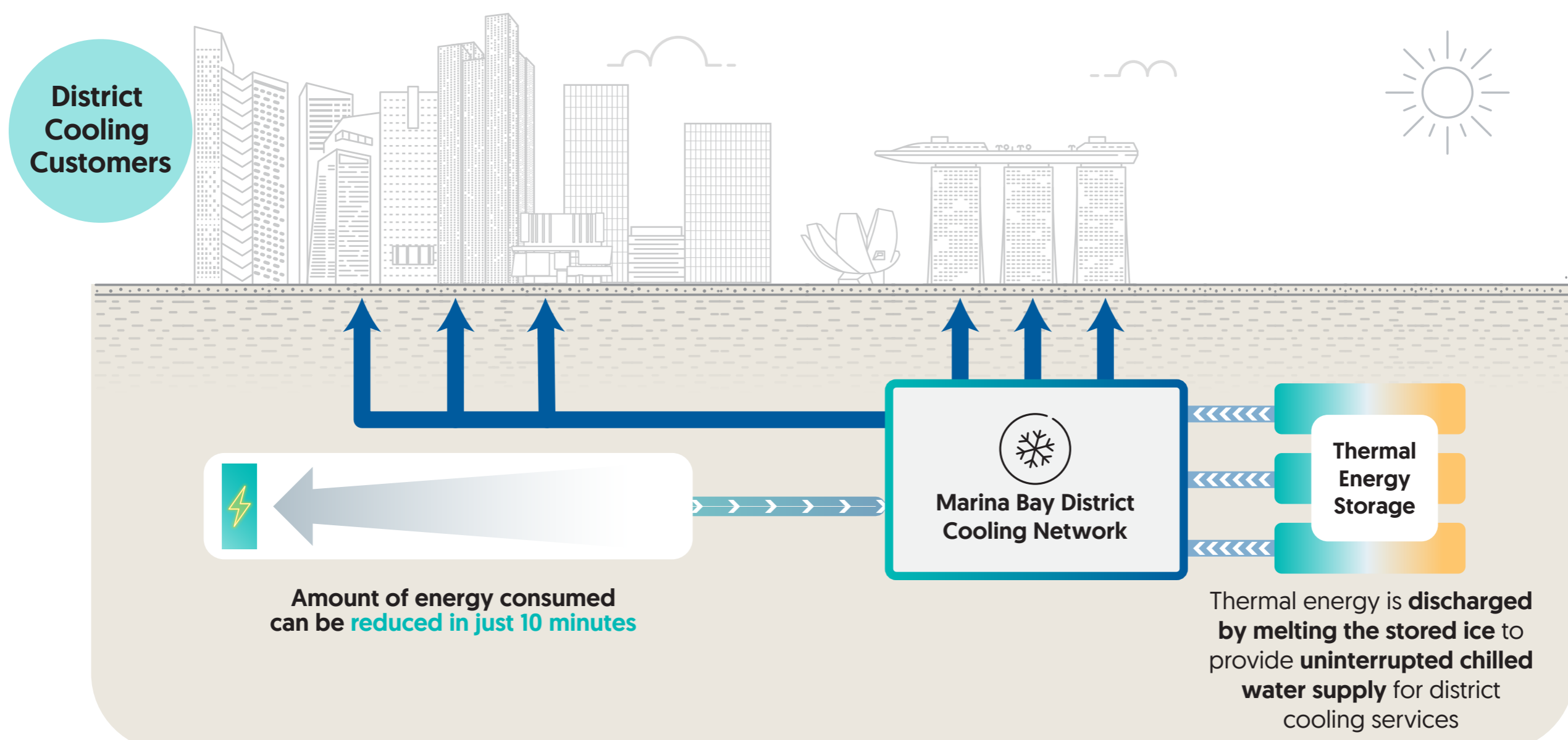
**FREES UP** electricity supply which will enable the grid to be more stable and resilient, and to act as an additional resource when electricity supply conditions are tight

## How Does It Work?

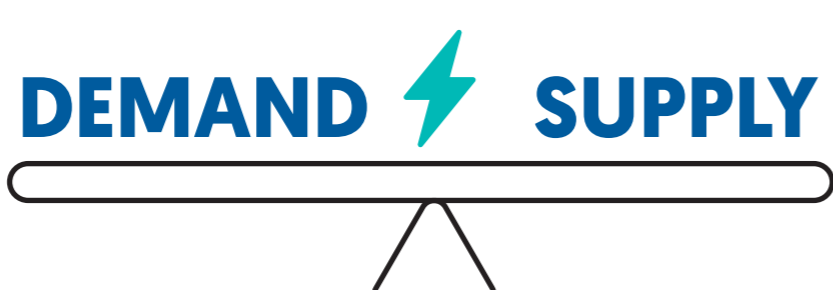
### 1. Day-to-day Operations



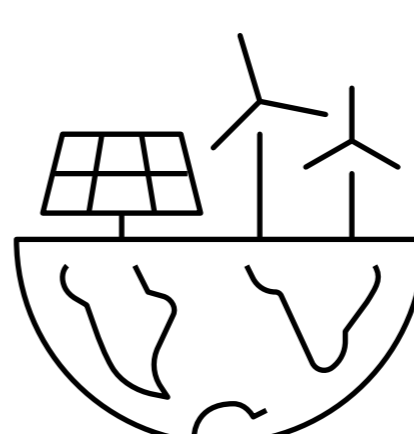
### 2. Activating Thermal Energy Storage to Support Demand Response



### 3. The Electricity Freed up Can:



Help **balance** electricity demand and supply



**Replace/substitute** supply from renewable energy when required