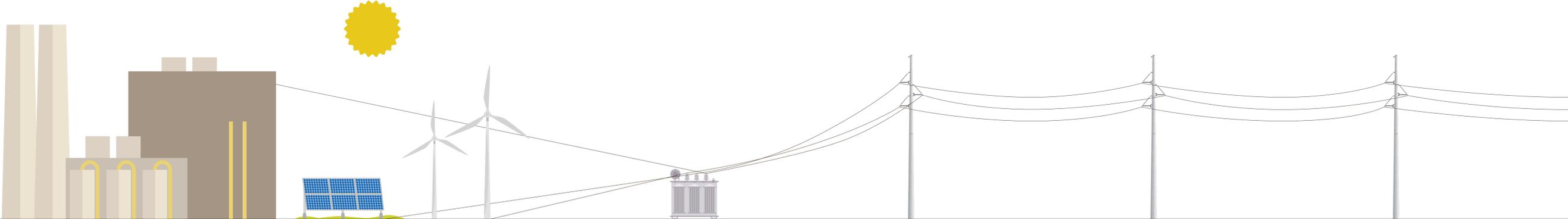


Understanding Transmission & Distribution



1. Generation

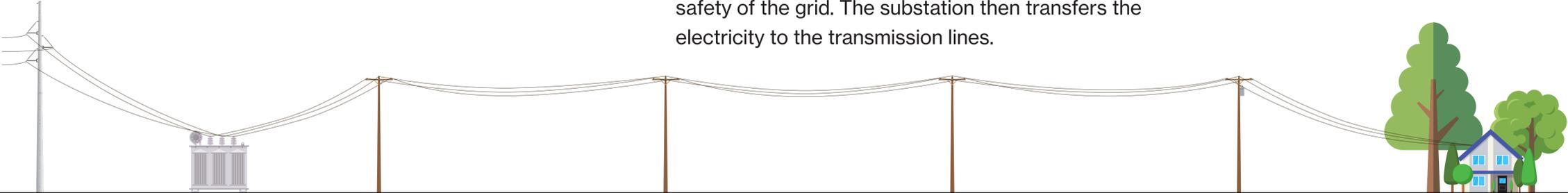
Electricity is created at an electric generation facility. Example generation facilities include thermal power plants, solar farms, wind farms, and hydroelectric dams.

2. Transmission Substation

Transformers at the transmission substation consolidate and increase the voltages of the electricity created at the generation facilities. Electric voltages are increased to standard transmission voltages to increase efficiency and safety of the grid. The substation then transfers the electricity to the transmission lines.

3. Transmission Lines

Transmission lines carry high voltage electricity long distances to be distributed to cities or counties. In some instances, AES Ohio's transmission lines will connect to other local utility substations to improve grid reliability.



4. Distribution Substation

Transformers in distribution substations lower the transmission voltages to voltages that are compatible to the local distribution grid. Local distribution substations control the flow of electricity to improve grid reliability and to protect from equipment failures.

5. Distribution Lines

Distribution lines carry distribution voltages across local communities through an expansive grid. Distribution lines are typically found on smaller poles near road right-of-way or underground.

6. Your Home or Business

Prior to the electricity reaching your home or business, an additional transformer is needed to lower the voltage to ensure that it is compatible for various uses.