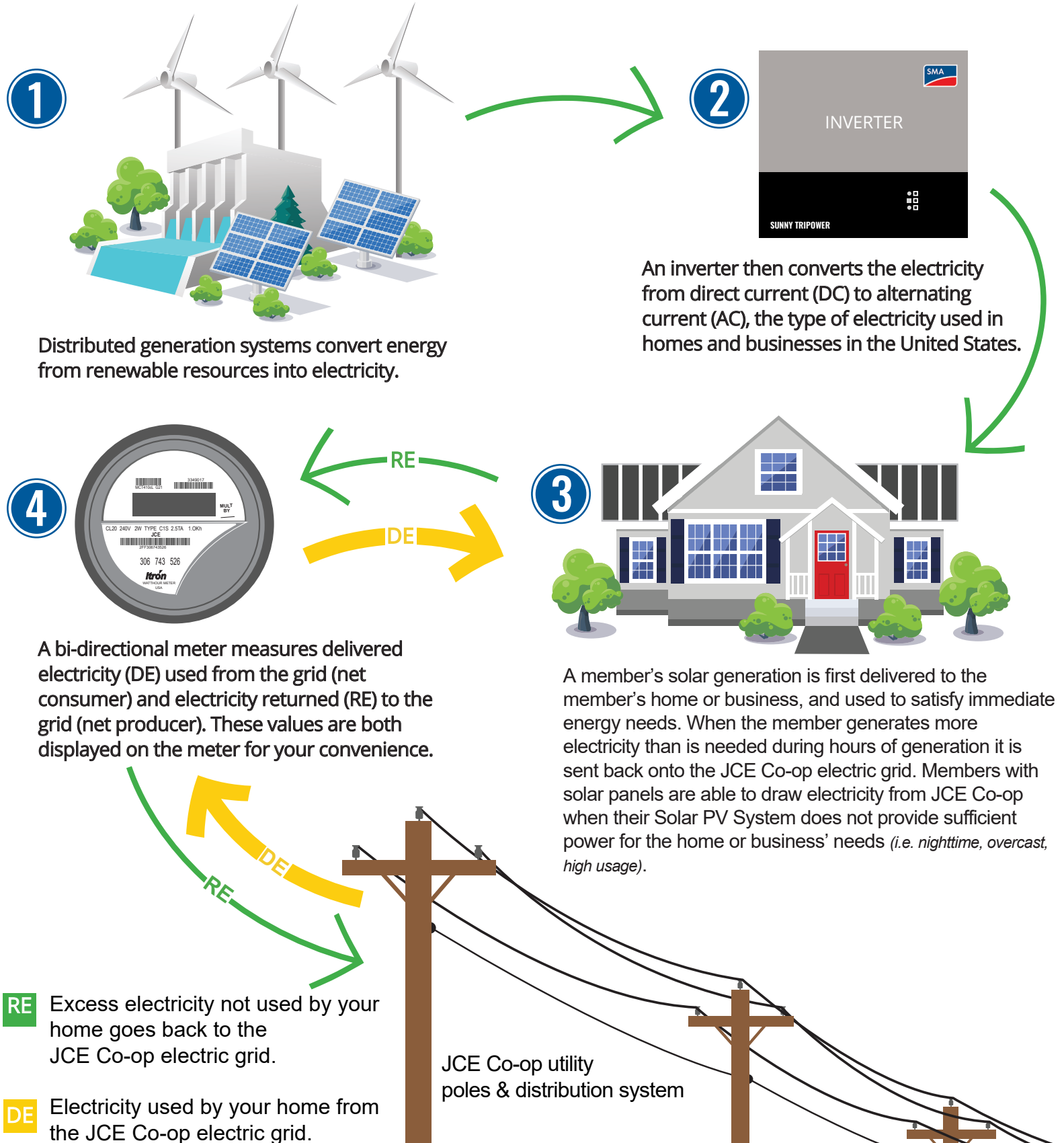


Distributed Generation and the Electric Grid

Solar PV, Wind, Micro-Hydro Example

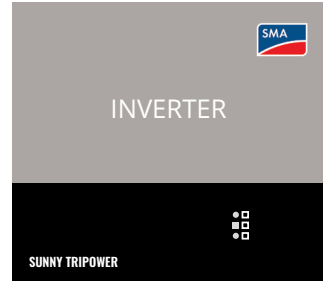


1



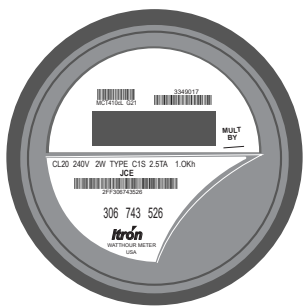
Distributed generation systems convert energy from renewable resources into electricity.

2



An inverter then converts the electricity from direct current (DC) to alternating current (AC), the type of electricity used in homes and businesses in the United States.

4



A bi-directional meter measures delivered electricity (DE) used from the grid (net consumer) and electricity returned (RE) to the grid (net producer). These values are both displayed on the meter for your convenience.

3



A member's solar generation is first delivered to the member's home or business, and used to satisfy immediate energy needs. When the member generates more electricity than is needed during hours of generation it is sent back onto the JCE Co-op electric grid. Members with solar panels are able to draw electricity from JCE Co-op when their Solar PV System does not provide sufficient power for the home or business' needs (i.e. nighttime, overcast, high usage).

RE Excess electricity not used by your home goes back to the JCE Co-op electric grid.

DE Electricity used by your home from the JCE Co-op electric grid.

JCE Co-op utility poles & distribution system