# **Role-play activity information**

Sometimes, we don't know all the facts when we are engaging in a role-play activity. Use this as a guide to engage in the discussion.

#### Group 1:

Cut out each slip and give it to the student who will be playing the character.

Professor Sunny, the solar energy expert	<ul> <li>Explains how solar panels work and their benefits for clean energy production.</li> <li>Provides facts about the decreasing costs of solar technology.</li> <li>Demonstrates how solar energy can be stored for use during nighttime and cloudy days.</li> </ul>
Engineer Windy, the wind power specialist	<ul> <li>Clarifies misconceptions about wind turbines and wildlife.</li> <li>Shares data on the increasing efficiency of wind energy technology.</li> <li>Explains how wind farms create new job opportunities in rural areas.</li> </ul>
Dr. Factual, the climate scientist	<ul> <li>Presents clear evidence of human-caused climate change.</li> <li>Explains the environmental benefits of transitioning to renewable energy.</li> <li>Provides accurate information on the carbon footprint of different energy sources.</li> </ul>



# **Role-play activity information**

Sometimes, we don't know all the facts when we are engaging in a role-play activity. Use this as a guide to engage in the discussion.

#### Group 2:

Cut out each slip and give it to the student who will be playing the character.

Mr Coaly, the coal miner owner	<ul> <li>Claims renewable energy is unreliable and can't power a city 24/7.</li> <li>Argues that coal jobs are essential for the local economy.</li> <li>Spreads false information about wind turbines causing health problems.</li> </ul>
Ms Guzzle, the gas station owner	<ul> <li>Insists that electric vehicles are too expensive for most families.</li> <li>Claims that the electricity for EVs comes mostly from fossil fuels anyway.</li> <li>Exaggerates the fire risks of solar panels on rooftops.</li> </ul>
Dr. Skeptic, the climate change denier	<ul> <li>Argues that climate change is a natural cycle and not caused by humans.</li> <li>Claims that renewable energy is more harmful to the environment than fossil fuels.</li> <li>Spreads misconceptions about the inefficiency of renewable energy technologies.</li> </ul>



# **Role-play activity information**

Sometimes, we don't know all the facts when we are engaging in a role-play activity. Use this as a guide to engage in the discussion.

## Group 1:

#### Key facts:

- Renewable energy accounted for 39.4% of Australia's total electricity supply in 2023.
- 5.9 GW of new renewable generation capacity was added in Australia in 2023.
- Solar and wind energy are now among the cheapest forms of energy production.
- Renewable energy can provide reliable power through advancements in energy storage and grid management, as well as the combination of multiple sources.
- The potential of renewable energy is vast and often underestimated.
- Renewable energy sources have much lower lifecycle emissions and environmental impacts compared to fossil fuels.

#### Debunked myths:

Myth: Renewables are unreliable.

**Fact:** Advancements in energy storage and grid management allow renewables to provide reliable power.

Myth: Renewable energy is too expensive.

**Fact:** The cost of renewable energy has significantly decreased, making it competitive with or cheaper than fossil fuels.

Myth: Renewables cannot meet energy demand.

**Fact:** With proper planning and investment, renewables can supply a significant portion of energy needs.

**Myth:** Renewable energy harms the environment. **Fact:** Renewables have much lower environmental impacts compared to fossil fuels.

Myth: Renewables require too much land.

**Fact:** Land use can be minimized by integrating renewables into existing infrastructure and using low-value property.

**Myth:** Renewable energy leads to more blackouts. **Fact:** Battery storage solutions can provide power during times of low production.



## **Roleplay activity information**

Sometimes, we don't know all the facts when we are engaging in a role-play activity. Use this as a guide to engage in the discussion.

### Group 2:

This is a list of common misconceptions and claims that are spread by misinformation and disinformation.

Claim: Renewable energy is unreliable and can't power a city 24/7 Truth: This ignores advancements in energy storage and grid management.

Claim: Renewable energy is more expensive than traditional sources Truth: This overlooks the significant cost reductions in recent years.

Claim: Wind turbines cause health problems Truth: There is no scientific evidence supporting this claim.

Claim: Electric vehicles are too expensive for average families Truth: This doesn't consider long-term savings and decreasing costs.

Claim: The electricity for EVs comes mostly from fossil fuels Truth: This ignores the increasing share of renewables in the energy mix.

**Claim: Solar panels produce significant waste Truth:** This doesn't mention that fossil fuel energy generates far more waste.

Claim: Climate change is a natural cycle and not caused by humans Truth: This contradicts overwhelming scientific evidence.

Claim: Renewable energy is more harmful to the environment than fossil fuels Truth: This ignores the lower lifecycle emissions of renewables.

