

Renewable Energy &
Smart Grid Technologies:
Smart Grid Risks

Smart Grid, Utilities &
Consumers

Smart Grid & the
Environment

Renewable Energy

Week 4 Resources and
Evaluation

✓ **Reading:** Renewable
Energy & Smart Grid
Technologies (OPTIONAL)
Resources
30 min

✓ **Quiz:** Renewable Energy
& Smart Grid
Technologies
10 questions

Roadmap to Success in
the Energy and Utilities
Industry: Phase 1

Course Key Takeaways

QUIZ • 30 MIN

Renewable Energy & Smart Grid Technologies

✓ **Submit your assignment**

DUE Mar 23, 1:29 PM IST **ATTEMPTS** 3 every 8 hours

[Try again](#)

✓ **Receive grade**

TO PASS 80% or higher

Grade
100%

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We keep your highest score





Congratulations! You passed!

TO PASS 80% or higher

Keep Learning

GRADE

100%

Renewable Energy & Smart Grid Technologies

LATEST SUBMISSION GRADE

100%

1. Fossil fuels have been a fundamental source of energy since its inception. Which of the following is not an argument for why we should change fuel sources?

1 / 1 point

- ☐ Use of fossil fuels contributes to global climate change
- ☐ Supplies are running out
- ☐ Balance of trade
- ☒ Sustainable fuel sources are more reliable 24/7



Correct

Correct!



Renewable Energy & Smart Grid Technologies

Graded Quiz • 30 min

Due Mar 23, 1:29 PM IST

2. Which of the following is not a sustainable energy source?

1 / 1 point

- ☒ Coal
- ☐ Geothermal
- ☐ Biomass
- ☐ Solar



Correct

Correct!

3. All renewable energy sources are sustainable.

1 / 1 point

- ☐ False
- ☒ True



Correct

Correct!



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Graded Quiz • 30 min

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4. Which of the following can be smart technologies? Choose all that apply.

1 / 1 point

☒ Automated thermostat

✓ **Correct**

Although your answer is correct it is not the only kind of smart technology. Please refer to the lecture in module 4 for more information.

☒ Meters that record interval data

✓ **Correct**

Although your answer is correct it is not the only kind of smart technology. Please refer to the lecture in module 4 for more information.

☒ Home area networks

✓ **Correct**

Although your answer is correct it is not the only kind of smart technology. Please refer to the lecture in module 4 for more information.

☒ Sensors and measuring devices

✓ **Correct**

Although your answer is correct it is not the only kind of smart technology. Please refer to the lecture in module 4 for more information.



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5. Which of these adds the most carbon dioxide to the atmosphere?

1 / 1 point

- ☐ Wind
- ☐ Solar
- ☐ Hydroelectric
- ☒ They all add the same amount.



Correct

Correct!

6. Which of the following does not derive its energy from the sun?

1 / 1 point

- ☒ Nuclear
- ☐ Wind
- ☐ Biomass
- ☐ Hydroelectric



Correct

Correct!



7. Which of the following is enabled by smart grids? Choose all that apply.

1 / 1 point

☒ Distributed generation



Correct

Although your answer is correct it is not the only answer enabled by smart grids. Please refer to the lecture in module 4 for more information.

☐ Validation of energy efficiency programs

☒ Automatic fault prevention, isolation and restoration



Correct

Although your answer is correct it is not the only answer enabled by smart grids. Please refer to the lecture in module 4 for more information.

☒ Condition based preventative maintenance



Correct

Although your answer is correct it is not the only answer enabled by smart grids. Please refer to the lecture in module 4 for more information.



8. Why should smart grid technologies be used? Choose all that apply

1 / 1 point

- ☒ It generates billions of data points from thousands of system devices from hundreds of thousands of customers



Correct

Although your answer is correct it is not the only reason smart grids technologies should be used. Please refer to the lecture in module 4 for more information.

- ☐ It diminishes the performance of the electric generation and distribution grid

- ☒ It can increase consumer interaction with the grid



Correct

Although your answer is correct it is not the only reason smart grids technologies should be used. Please refer to the lecture in module 4 for more information.

- ☒ It adds intelligence to all areas of the electric power system to optimize electricity use



Correct

Although your answer is correct it is not the only reason smart grids technologies should be used. Please refer to the lecture in module 4 for more information.



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9. Which of the following statements is true?

1 / 1 point

- ☐ Energy resources are equally available to all
- ☐ Sustainable energy has three key components: renewable energy, environmental effect, and energy efficiency.
- ☐ A renewable energy source is an energy source that can be used for centuries without depleting natural resources.
- ☒ Energy resources can vary in performance based on location.

✓ Correct
Correct!

10. Which of the following statements about solar power is false?

1 / 1 point

- ☐ Power available is dependent on geography.
- ☒ Solar panels can have efficiency up to 70%.
- ☐ Large area is needed to generate power.
- ☐ The system has no moving parts.

✓ Correct
Correct!