

# SDG14 Future of the Ocean

## MM3: Offshore Renewable Energy



### Micro-Module 3: Offshore Renewable Energy

### Research and Development

### Lesson 12: Offshore Wind in the Community

**Subjects: Climate Action and Sustainable Development, Design, English, Engineering Science**

**7** AFFORDABLE AND CLEAN ENERGY



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



**11** SUSTAINABLE CITIES AND COMMUNITIES



**13** CLIMATE ACTION



### Lesson Title and Summary: Offshore Wind in the Community

In this lesson, two engaging activities explore the benefits of wind farms within communities. In Activity 1, learners watch a series of brief videos showcasing testimonials from various communities benefiting from wind farms. These videos highlight aspects such as community ownership models, educational advantages, and broader societal benefits. Between videos, learners brainstorm and compile a list of benefits on a shared platform. Activity 2 follows, prompting learners to create posters advocating the advantages of wind farms for public display. The lesson aims to deepen learners' understanding of renewable energy's positive impact and develop their communication skills through poster creation.

### Vocabulary: Community Ownership, Testimonial, Public Engagement

### In this lesson, the learner will:

- Explore community benefits from wind farms
- Engage in Group Brainstorming
- Develop Communication Skills
- Deepen Understanding of Renewable Energy

### Materials

- Worksheet: Community Testimonials
- Internet access
- Pen, Paper
- Whiteboard
- Materials for poster creation

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## L12 Offshore Wind in the Community



### ACTIVITY INSTRUCTIONS

#### Activity 1: Testimonials from Communities and benefits brainstorm (30 mins)

1. Watch the video Allt Dearg wind farm | Interview, James Lithgow [2:50 mins] and answer the questions on the worksheet: Community Testimonials part 1.
2. Watch the video Wind Power: A Superintendent's Story [1:07 mins] and answer the questions on the worksheet: Community Testimonials part 2.
3. Watch the video AWEA Wind Power 101: Community Benefits [2:38 mins] and answer the questions on the worksheet: Community Testimonials part 3.
4. Watch the video BladeBridge installation in Cork, Ireland [2:16 mins] and answer the questions on the worksheet: Community Testimonials part 4.
5. After watching all of the videos, have learners complete the worksheet: Community Testimonials part 5.
6. Briefly discuss their answers.

#### Activity 2: Poster creation (20 mins)

1. Invite learners to make posters to be displayed to the public on the community benefits of wind farms. They should consider:
  - a. What are the benefits?
  - b. What problems could wind turbines help solve in their community?
  - c. What would they suggest the community do with the revenue generated from wind turbines?
2. If time allows, have learners present their posters.

### REFLECTIVE EXERCISE: 3-2-1

- Three things they feel they have learnt from the exercise
- Two things they found most interesting and would like to explore more
- One – their opinion they have about the site / exercises

Use Post-its or a Mentimeter survey - [mentimeter.com](https://www.mentimeter.com) to gather reflections

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### EXTENSION / REDUCTION ACTIVITIES:

**Reduction:** For a shorter class, reduce the number of videos that learners watch of the community benefits. Consider skipping the poster creation activity.

**Extension:** For a longer class, have learners explore the articles in the media box. Give more time to create their posters. Have each group share their poster. This could also be a series of lessons, culminating in presenting their posters to the community. See Media Communications Micro-Module 2: Research Poster

### MEDIA BOX: (materials, online video links, extra resources, case studies etc)

Allt Dearg wind farm | Interview, James Lithgow [2:50 mins] [https://www.youtube.com/watch?v=C7Ltr97RYYY&ab\\_channel=NetZeroWeek%E2%84%A2](https://www.youtube.com/watch?v=C7Ltr97RYYY&ab_channel=NetZeroWeek%E2%84%A2)

Wind Power: A Superintendent's Story [1:07 mins] [https://www.youtube.com/watch?v=iD\\_Oh3K9UC8&t=61s&ab\\_channel=AmericanCleanPowerAssociation](https://www.youtube.com/watch?v=iD_Oh3K9UC8&t=61s&ab_channel=AmericanCleanPowerAssociation)

AWEA Wind Power 101: Community Benefits [2:38 mins] [https://www.youtube.com/watch?v=Ubj3ZS5jYy4&list=PLKzbiB\\_o8fSdobj9jJyvp0tFuLdt\\_mfMS&t=110s&ab\\_channel=AmericanCleanPowerAssociation](https://www.youtube.com/watch?v=Ubj3ZS5jYy4&list=PLKzbiB_o8fSdobj9jJyvp0tFuLdt_mfMS&t=110s&ab_channel=AmericanCleanPowerAssociation)

BladeBridge installation in Cork, Ireland [2:16 mins] [https://www.youtube.com/watch?v=8bmWAX\\_6uAY&ab\\_channel=CompositesWorld](https://www.youtube.com/watch?v=8bmWAX_6uAY&ab_channel=CompositesWorld)

Article: The concrete benefits of wind power for farmers: <https://cleanpower.org/blog/concrete-benefits-wind-power-farmers/>

Article: 5 Ways Rural Communities Can Win with Wind: <https://cleangridalliance.org/blog/45/6-ways-wind-projects-can-win-with-wind>

The Re-Wind Project: <https://www.marei.ie/project/re-wind/>

### Local Trip / Expertise / Additional Work and Assessments

1. Consider a visit to Cork bridge made from Wind Turbine Blades.
2. Explore more about the [Re-Wind project](#) of repurposing wind turbines after that have been taken out of use.
3. Find out if there's a community-owned wind farm in your area and how the community is benefitting from it?



## Part 1

After watching the video, answer the following questions:

1. What wind farm do they discuss?

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2. What is unusual about the ownership of this wind farm?

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3. What do they say about the economic benefit of the wind farm to the community?

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4. How do they help support local young people? What do you think of this?

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5. How did they name the turbines?

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6. What two types of turbines do they have?

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7. How do you they us AI - Artificial Intelligence?

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8. What do they say the wind farm brings to the table?

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### Part 2

After watching the video, answer the following questions:

1. How much money do they generate per year?

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2. How much will they have have made?

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3. What do they do with that money?

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### Part 3

After watching the video, answer the following questions:

1. Why might wind turbines be the new 'cash crop' for farmers?

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2. What did the farmer say wind turbines have done for them?

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## MM3: L12 WS COMMUNITY TESTIMONIES

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3. What challenges did the farmers say they are facing at the moment (e.g. drought)?

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4. How much does one of the farmers make per year from the wind turbines?

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5. What were the broader benefits of the wind turbines to the community?

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6. What impact does it have on young adults? Does your area in Ireland face a similar problem?

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7. What do the wind turbines help pay for in the community?

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### Part 4

After watching the video, answer the following questions:

1. What do you see in this video?

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2. What do you think of the process of installing a wind turbine?

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3. How do you think this relates to community benefits?

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4. How could old parts from a wind turbine be reused for the community?

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## Part 5

Now that you have watched the videos, discuss these questions in your groups. You may want to use a separate piece of paper to take more notes:

1. Does your town in Ireland face any of the same problems as the communities in the videos (e.g. young people moving away due to lack of opportunities)? If so, what?

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2. What other social and economic problems does your community face?

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3. How could wind turbines benefit your town?

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4. What would you want your community to do with the revenue from wind turbines?

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