

Assessment type: Presentation video recording**Weightage: 30%**

Students are required to prepare (individual) **10 min video recorded presentation** using aids such as a PowerPoint based on given theme.

Theme:

Rathlin Island is a small island located off the north coast of Co. Antrim, with a population of roughly 150 permanent residents. Rathlin Island also enjoys a seasonal population increase, with 30,000 tourists visiting Rathlin annually, with most of these visitors coming during the summer months. Rathlin Island has a range of abundant natural energy resources, including wind, biofuel and geothermal, however, very little of the natural, renewable energy sources are currently taken advantage of. In the main, residents currently rely on expensive fossil fuels imported from the mainland to power and heat their homes and businesses. The Rathlin Island Action Plan 2016-2020 outlines policies to improve energy efficiency and support renewable energy development, with a long-term goal for Rathlin to become carbon neutral.

Further reading and information can be found via following web-page.

<https://clean-energy-islands.ec.europa.eu/countries/ireland/rathlin>
<https://www.infrastructure-ni.gov.uk/publications/rathlin-island-policy-and-action-plan>

Task:

Please select one technology from **Distributed generation (DG) or Demand response (DR)** and one **Energy Storage (ES)** integrated with it for Rathlin Island. Using existing information, literature search and knowledge, prepare a 10 min presentation (roughly 10 slides) giving key information with following contents as minimum:

1. Title page
 2. Introduce the topic, theme (global views of such islands), need/motivation of this work and background.
 3. Aim of this presentation: What is addressed?
 4. Key issues
 5. Rationale of technology selection (DG/Dr and ES): Why? sector to be deployed/benefits (domestic, commercial, transport) etc of selected technology.
 6. Technical details: Information on technology, size/capacity, cost (installation/operation/maintenance), technoeconomic, payback, savings (cost/energy/emissions)
 7. Key benefits, potential and barriers
 8. What else can be done, other solutions/changes to adopt?
 9. Conclusion
 10. References
- ✓ Please ensure to keep your camera on (video) as its video recorded presentation using video recording tools available to ulster students such as Panopto.
 - ✓ Further guidance on how to record, upload and submit video assignment is available in assessment section folder > Presentations.

- ✓ Your submission would be marked based on following marking criteria as shown in module handbook.

1=Poor and 10= excellent

1.) Adequate introduction/background information on the topic	1	2	3	4	5	6	7	8	9	10
2.) Clear presentation with aim/objective and logical sequence	1	2	3	4	5	6	7	8	9	10
3.) Command of knowledge (technical content)	1	2	3	4	5	6	7	8	9	10
4.) Justification and clarity of principles/ideas/concept	1	2	3	4	5	6	7	8	9	10
5.) Visual aids (graph, table, images etc)	1	2	3	4	5	6	7	8	9	10
6.) Communication skills (video and audio)	1	2	3	4	5	6	7	8	9	10
7.) Presenter confidence and convincing style (on concepts)	1	2	3	4	5	6	7	8	9	10
8.) Addresses key questions/task of the topic	1	2	3	4	5	6	7	8	9	10
9.) Supporting materials (references, citations as per standards)	1	2	3	4	5	6	7	8	9	10
10.) Overall impact of presentation	1	2	3	4	5	6	7	8	9	10

Description: **Following marking criteria will be used to mark the presentation video recording**

Grid View	List View									
	1 = Poor	2	3	4	5	6	7	8	9	10 = Excellent
1.) Adequate introduction to the topic	1 (1.00%)	2 (2.00%)	3 (3.00%)	4 (4.00%)	5 (5.00%)	6 (6.00%)	7 (7.00%)	8 (8.00%)	9 (9.00%)	10 (10.00%)
2.) Clear presentation of aim and logical sequence	1 (1.00%)	2 (2.00%)	3 (3.00%)	4 (4.00%)	5 (5.00%)	6 (6.00%)	7 (7.00%)	8 (8.00%)	9 (9.00%)	10 (10.00%)
3.) Command of knowledge (technical content)	1 (1.00%)	2 (2.00%)	3 (3.00%)	4 (4.00%)	5 (5.00%)	6 (6.00%)	7 (7.00%)	8 (8.00%)	9 (9.00%)	10 (10.00%)
4.) Clarity of presentation (communication of principles/ideas)	1 (1.00%)	2 (2.00%)	3 (3.00%)	4 (4.00%)	5 (5.00%)	6 (6.00%)	7 (7.00%)	8 (8.00%)	9 (9.00%)	10 (10.00%)
5.) Visual aids (graph, table, image etc)	1 (1.00%)	2 (2.00%)	3 (3.00%)	4 (4.00%)	5 (5.00%)	6 (6.00%)	7 (7.00%)	8 (8.00%)	9 (9.00%)	10 (10.00%)
6.) Communication skills	1 (1.00%)	2 (2.00%)	3 (3.00%)	4 (4.00%)	5 (5.00%)	6 (6.00%)	7 (7.00%)	8 (8.00%)	9 (9.00%)	10 (10.00%)
7.) Presenter confidence and convincing style	1 (1.00%)	2 (2.00%)	3 (3.00%)	4 (4.00%)	5 (5.00%)	6 (6.00%)	7 (7.00%)	8 (8.00%)	9 (9.00%)	10 (10.00%)
8.) Address of key question of the topic	1 (1.00%)	2 (2.00%)	3 (3.00%)	4 (4.00%)	5 (5.00%)	6 (6.00%)	7 (7.00%)	8 (8.00%)	9 (9.00%)	10 (10.00%)
9.) Supporting material	1 (1.00%)	2 (2.00%)	3 (3.00%)	4 (4.00%)	5 (5.00%)	6 (6.00%)	7 (7.00%)	8 (8.00%)	9 (9.00%)	10 (10.00%)
10.) Overall impact of presentation	1 (1.00%)	2 (2.00%)	3 (3.00%)	4 (4.00%)	5 (5.00%)	6 (6.00%)	7 (7.00%)	8 (8.00%)	9 (9.00%)	10 (10.00%)