EC928 Energy Economics
Individual Essay
2021/2022

You are required to submit an individual assessment essay which contributes 80% of the final mark for this class. You must submit your essay electronically via MyPlace by **12noon on 17th of December 2021**. Feedback and marks will be made available 15 working days later via MyPlace in line with University policy.

The maximum number of words is 3,000 (not including tables, figures, charts, references or footnotes). Penalties for late submission and exceeding the word limit can be found below.

By submitting your essay to MyPlace you are confirming authorship of your work.

ASSESSMENT CRITERIA

Your essay will be assessed on the basis of the following criteria:

- The essay is structured appropriately to address the question set;
- The essay demonstrates an ability to convey economic and/or technical terms in intuitive language;
- The essays show an understanding of the key economic issues at the heart of the topic selected;
- The essay demonstrates an ability to synthesize material from a variety of sources, and provide relevant critical thinking;
- Diagrams are used, are clearly presented and explained and support the arguments made in the essay.

LATE SUBMISSIONS OF COURSEWORK

Penalties for late submission will be applied in line with the University published policies:
https://www.strath.ac.uk/media/ps/cs/gmap/academicaffairs/policies/Policy_and_Procedure_for_the_Late_Submission_of_Coursework.pdf.pagespeed.ce.dLHAxb3k-D.pdf

Requests for extensions will be considered in line with the University policies:
https://www.strath.ac.uk/media/ps/cs/gmap/academicaffairs/policies/Policy_and_Procedure_on_Extensions_to_Submissions_of_Coursework.pdf

PENALTY FOR EXCESS WORDS

Any words after the limit will not be marked. The word count **must** be given.

Questions (choose one question from these three options)

1. For a technology of your choosing, explain the calculation of the Levelised Cost of Electricity (LCOE) and recent examples of the LCOE for this technology, including comparisons to other technologies. Looking at the LCOE for this technology over time, what have been the major (policy and non-policy) factors which have caused the costs for your chosen technology to change?

2. Find a recent article in an academic journal, a good newspaper or energy industry magazine which sets out an energy issue which can be analysed using an economic technique from at least one of the topics from the class. *If you are unsure if there are economic aspects to the issue you have selected, please speak to the lecturer in charge of the class* ***before*** *you begin work on the essay.* For the energy issue identified in the article, you should answer the following points:
    a. Summarise the energy issue in your own words and the economic technique or concept to which it relates;
    b. Discuss the energy issue using economic techniques from the class and citing appropriate and relevant literature from the class and your own wider reading on the energy issue.
    c. Analyse what insights to this issue can be gained from looking from an economic perspective.

3. For a country of your own choosing – and using data provided for Topic 5 – carry out an Index Decomposition Analysis (IDA) to analyse the drivers of changes in economy-wide energy demand over a period of time with a minimum of five years. In your answer you should:
    a. Summarise industrial energy demand in the chosen country at the starting period covered by your analysis;
    b. Set out and explain the IDA approach in your own words;
    c. Carry out and report the results of the IDA decomposition;
    d. Explain the relevance of your results for policymakers in the country who are seeking to understand changes in economy-wide energy demand.

4. Set out the major elements of the changes to the UK's electricity system introduced following the Electricity Market Reforms (EMR) from 2013. To what extent do you agree with the statement: "the changes introduced through EMR been effective in encouraging the development of more renewable electricity into the generation mix"?