

MODULE DESCRIPTOR

Module Title

Energy and Transitions Management

Reference	BSM223	Version	1
Created	November 2020	SCQF Level	SCQF 11
Approved	September 2021	SCQF Points	15
Amended		ECTS Points	7.5

Aims of Module

To provide learners with an advanced understanding of the role, function and nature of organisations involved in technical, financial, commercial and contractual activities associated with the energy transition. These include the role of government (both as shaper of the market and as regulator), commercial companies (as developers and as supply chain companies) and other organisations such as researchers and academics, lobbying organisations, trade bodies and others.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Critically evaluate global energy demand and supply in relation to a transition from carbon-intensive to low carbon sources and the broad technological issues of decarbonisation.
- 2 Critically appraise the national, international and intergenerational considerations and the roles of governments and other stakeholders in the justice and equity dimensions of energy transition.
- 3 Critically review the objectives and functions of commercial organisations in the energy transition within the constraints of international frameworks and the political economy of differential responsibilities of state and private actors.
- 4 Critically analyse the broad principles and practical implementation of financial support mechanisms to deliver the energy transition.
- 5 Critically evaluate the risks associated with energy transition projects across the life cycle of a development

Indicative Module Content

A detailed review of the global energy system ? as it is today with over 80% of energy derived from hydrocarbons, what an ?energy transition? might involve, and what a future decarbonised global energy system might look like. Government strategy for facilitating the energy transition. Commercial models to facilitate the energy transition. Risks associated with energy transition (political, economic, sociological, technological and environmental). Emerging and evolving regulation. The emergence of a new supply chain and the impact of this. New commercial relationships. Project evaluation and economics

Module Delivery

The module is delivered in full-time on campus and part time online modes. For on campus teaching this is a lecture-based course supplemented with in-class discussions. For online, this involves self-directed learning using paper and web-based sources supplemented by video lectures and online discussions.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	36	36
Non-Contact Hours	114	114
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	150
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Coursework	Weighting:	100%	Outcomes Assessed:	1, 2, 3, 4, 5
Description:	Report				

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

Component 1 comprises 100% of the module grade. To pass the module, a D grade is required.

Module Grade	Minimum Requirements to achieve Module Grade:
A	A
B	B
C	C
D	D
E	E
F	F
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	None.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 Lees, E. and Viñuales, J.E. (2019). *The Oxford Handbook of Comparative Environmental Law*. Oxford Online.
- 2 Mackay, D. (2009). *Sustainable Energy - without the hot air*. Cambridge: UIT.
- 3 Morton, O. (2016). *The Planet Remade: How Geoengineering Could Change the World*. London: Granta Books.
- 4 Smil, V. (2017). *Energy and Civilisation: A History*. Massachusetts: The MIT Press.
- 5 Smil, V (2017). *Energy Transitions: Global and National Perspectives*. Connecticut: Praeger.