

Vak: Energy Business Plan Development

credits: 5

Vakcode	SUVH15IC1
Naam	Energy Business Plan Development
Studiejaar	2020-2021
ECTS credits	5
Taal	Engels
Coördinator	J.J.A. Scheepens-Hasek

Werkvormen	Werkvorm 1
Toetsen	Report & Presentation - Overige toetsing

Leeruitkomsten

After completion of this course the student will:
be able to

- □ Assess the - sustainable-energy management activities of a business organisation with regard to an ideal system and international benchmarking perspective.
- □ Identify and formulate improvement and innovation options for the future by means of a roadmap of relevant sustainable energy options for phased application by the company including smart supply-demand side management options.
- □ Integrate knowledge from other modules on energy transition, economics, planning, management, design, infrastructures using in-class exercises with real life observation through study visits and in-company participation.
- □ Operationalize one or more options into attractive business plans (roadmaps) for the company.
- □ Have insight into the role of a company manager/coordinator responsible for sustainable energy system management including the core tools at her/his disposition

Inhoud

The EBPD project is carried out in cooperation with an existing industrial company or energy orientated business organization/network/NGO. Building on the outcomes of the theoretical -applied research- part from the previous module G6, it is aimed at a critical assessment of the company's/organisation's sustainable energy management plan with regard to its daily practice. The goal of the multi-disciplinary project is to formulate recommendations for introduction, optimization and/or innovation of the sustainable energy management system and operations of the company, by means of a roadmap: including long-term options towards an ultimate vision, with primary focus upon short-term business cases to speed-up the transition process. One or more business cases will be worked out in more detail, including the expected economic and environmental benefits, as well as potential internal and external obstacles for implementation. Students are, in line with the design thinking approach from the CORE and the previous module G6, encouraged to give the end-user a central role throughout the process. Next to interviews with various stakeholders, co-design workshops and pressure cookers with the users, an international energy system management benchmark study, applying various energy balance and management metrics, is part of the activities and the reporting. At the end of the project, the findings, roadmap, business cases and recommendations are presented to the company's/organization's energy manager and overall management. The company's/organization's energy manager and overall management are asked to reflect upon the general feasibility of the proposals with an explanation of why they will or will not adopt the proposed business plan(s) (this needs to be agreed upon at the start of the project).

In terms of the G5 assignment, the following template serves as a general guidance:

Design for Energy Company X a superior Sustainable Energy System (SES) for their (company, NGO, other) client Y, introducing (1) attractive Smart Energy Management concepts/options; (2) active Involvement of the Users, and other Stakeholders; and (3) building on international Best Practices. Present the outcomes both in terms of a SES-design proposal/concept and Roadmap as well as a Final Report, including (A) the use/integration the theoretical part of the previous module (G6) as a starting point; (B) addressing the environmental-economic (EVR, see below) aspects of the proposal; (C) describing the design and research methodology followed, preferably with the Andriessen model (see CORE and G6 modules) as starting point; and (D) adding under Recommendations a 1A4 EU Research Proposal that could help the further implementation of - advanced versions- of the proposed SES-system.

Opgenomen in opleiding(en)

European Master in Sustainable Energy System Management

School(s)

Instituut voor Engineering

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