# Introduction to energyPRO

energyPRO is a versatile tool designed for modelling, analyzing, and simulating complex energy systems and projects.

It supports cross sectional optimization including electricity, PtX, hybrid and thermal energy (such as process heat, hot water, and cooling).

energyPRO has proven to be useful in many situations covering investment analysis, technical limitations, and production scheduling.

Energy systems can be detailed and very complex. Developing and quantifying the entire value chain can be a time-consuming process, especially with continuous alterations.

energyPRO offers a user-friendly experience with built-in features and a scalable setup making the process much easier.

This can help you easily build and understand your energy system, defined reports and user-defined possibilities make it easier to extract the needed information for your setup.

In this course you will learn how to build complex energy systems and solve them through a techno-economic approach using the program's MILP-solver.

The focus areas of the course will be:

- The unit commitment problem
- Project settings
- Adding of fuels, energy conversion units and demands
- Understanding the MILP method
- Handling of reports and outputs
- Touching upon the different modules of energyPRO such as; DESIGN, OPERATION, COMPARE and REGION

EMD International

Niels Jernes Vej 10 I 9220 Aalborg Ø I Denmark
**tel:** +45 6916 4850 I **e-mail:** emd@emd.dk