

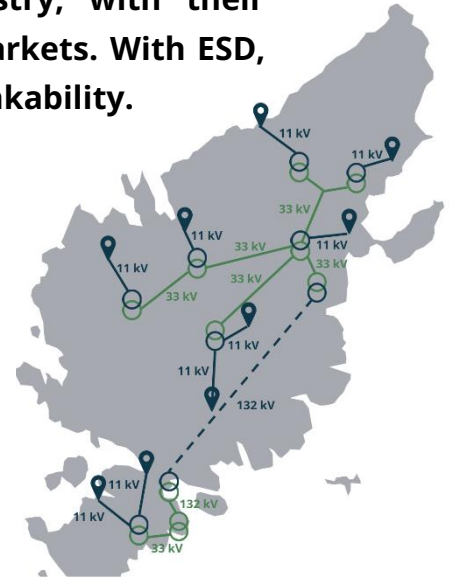
Energy System Design (ESD)

Sophisticated modelling and simulation of energy projects

Flexens' Energy System Design (ESD) incorporates realistic modelling and simulation into our energy projects. Our highly educated and certified energy specialists combine PLEXOS, the best tool in the industry, with their substantial insight and know-how of energy systems and markets. With ESD, Flexens enhances any project's feasibility, credibility, and bankability.

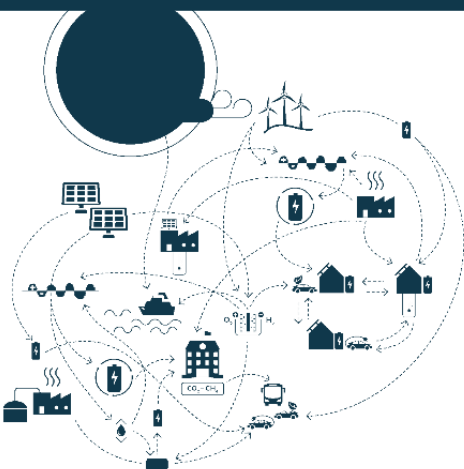
ESD provides our project developers with accurate and reliable energy market analyses, excellent for renewable energy projects of any scale. In ESD, Flexens' energy modelling team considers extensive input data: energy policies, subsidies, taxes, emission costs, and techno-economic features of different technologies.

The values of storage and Power-to-X are adequately captured in high-resolution modelling. Thus, Flexens' ESD offers significant cost-saving potential in all our projects.



| Typical energy modelling and simulation | Energy System Design (ESD) |
|---|--|
| <ul style="list-style-type: none"> ▪ Capability to model simple technologies ▪ Simulation accuracy down to 1 hour ▪ Linear programming (LP) or no optimisation ▪ Limited sector coupling capabilities | <ul style="list-style-type: none"> ▪ Capability to model complex projects ▪ Simulation accuracy down to 1 second ▪ Mixed-integer linear programming (MILP) optimisation ▪ Excellent sector coupling capabilities |

Carefully modelling complex energy systems to accurately support decision making



Flexens
ESD
ENERGY SYSTEM DESIGN

Key input data and project parameters
→ Energy system model
→ Most cost-efficient solution

