The world is how we shape it



New market trends

The market in Germany is an indicator for future markets in other latitudes in the world. Two thirds of Germany's electricity needs were generated from fossil fuels in 2017. By 2050, however, two thirds of the country's electricity supply will come from renewable energy sources. Additionally, the share of renewable energy in gross electricity consumption should be at least 80 percent, according to the forecast of the German Federal Ministry for Economic Affairs and Energy.

This shift is enabled by more cost-efficient solar photovoltaic systems, more affordable wind energy and decreasing battery costs. Costs of photovoltaic systems will drop by up to 20 percent by 2050 and forecasts predict wind cost savings of 60 percent. Solar and wind energy

systems are already competitive with coal and gas power plants, without the need of public incentives.

Bottlenecks in the planning of renewable energy projects
Energy utilities and project developers of wind farms and solar photovoltaic systems are getting prepared for this situation. However, a lack
of project capacity and shortages of staff are already evident

Companies offering renewable energy, energy efficiency, smart grids and storage solutions, are faced with new challenges in the management of these kind of projects. Worldwide, these are not only energy groups but also local energy suppliers and project developers.

Challenges

The growing number of projects is extremely challenging for energy suppliers and project developers: while every project is different, they all involve similar tasks and with higher volume, new challenges have to be overcome:

- _ Higher number of projects being developed at the same time
- Lack of accuracy in personnel planning: under- vs. overloaded employees in different project phases
- Different and time-consuming permit procedures in each country
- Incentive schemes and the development of renewable energy projects growing in complexity

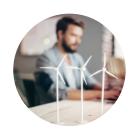


Renewable energy project tasks

Sopra Steria is the preferred consulting partner for the energy industry. Our project managers support your renewable energy project by providing a variety of services:

- _ Site search and acquisition
- _ Administration work and tracking of permit approvals with the relevant authorities
- Schedule planning with project responsibilities and project partners.
- _ Project controlling and compliance
- _ Time and resource management
- Requesting, checking and evaluating proposals and service specifications
- Analysis and evaluation owwf tenders
- Evaluation of financing alternatives and models
- Perform calculations (e.g. efficiency, energy yield and profitability)
- Coordination of internal and external project stakeholders
- Project documentation, coordination of requirements for contracting suppliers
- _ Coordination of subcontractor services
- _ Quality management for processes, methods and tools
- _ Review and evaluation of checklists

How we support you



Technology

- _ Assessment of the suitability of the property
- _Support in the design and simulations
- _Tracking of the development activities



Business

- _Search and analysis of subcontractors
- Contract negotiation
- Support in the evaluation of tenders



Organization

- Project coordination across all stages
- _Control of costs and schedule
- Internal and external resource management

Why Sopra Steria?

Our team of renewable energy project managers are industry and technology experts. They are certified according to PMI, Prince2 and IPMA. Customers will benefit from:

- **_**Long experience and expertise in the energy sector
- _ Deep knowledge in renewable energies, project planning and the industry simulation tools (e.g. PV-Syst and WindPRO)
- Expertise planning renewable energy projects in internationa environments



Our Pledge We adapt to new requirements, are customer-driven and highly flexible. Simply share your challenges, and we will share our solution with you. We continually strive for excellence, are advocates of sustainability, and our project managers are very keen to make their contribution for a more sustainable future. Contact us!

About Sopra Steria

Sopra Steria, a European leader in consulting, digital services and software development, helps its clients drive their digital transformation to obtain tangible and sustainable benefits. It provides end-to-end solutions to make large companies and organisations more competitive by combining in-depth knowledge of a wide range of business sectors and innovative technologies with a fully collaborative approach. Sopra Steria places people at the heart of everything it does and is committed to making the most of digital technology to build a positive future for its clients.

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