

Curious?  
Learn more here:



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<https://s.fhg.de/net-zero-energy>



## NET ZERO ENERGY: The New Energy Efficiency

The evolution to Industry 4.0 has made energy an even more complex issue. Industrial companies are not only being confronted with efficiency standards and changing legal constraints coupled with renewable energy variability but also have to keep an eye on ongoing digitalization, their infrastructures' resilience and steadily rising energy prices.

Becoming technically future-proofed, being prepared for unforeseeable events and thus ensuring continued production in the long-term are contingent on an integrated and structured energy assessment. Our experts at the Fraunhofer IFF use their long-standing scientific expertise to analyze these conditions at manufacturing facilities.

Building upon this, we use innovative tools to develop and implement the right solution technology-agnostically, always with an eye toward cost effectiveness and sustainability. We compile a detailed list of actions based on the individual objectives, covering the entire range from energy production and supply, including commercialization and reuse, to infrastructure integration and even new business models.

## Our Three-Point Plan for Your Objectives

### Requirements analysis and capability analysis

- Analysis of the basic energy and infrastructure conditions including operating, safety and facility requirements
- Definition of strategic objectives and the time horizon
- Examination of the legal requirements
- Data acquisition and as-is survey

### Technology Screening

- Compilation of individual and market agnostic technology summaries
- Review of and recommendations for amending operating and safety requirements and regulations

### Implementation plan

- Development of a system design, including technologies and actions
- Assessment of the complete system's economic efficiency, scalability, and economic and environmental impacts
- Assistance with the development of business models
- Implementation of the custom net-zero energy facility design

## Your Benefits

- **Energy and resource efficiency**  
Use natural resources and energy carriers economically and efficiently.
- **Decarbonization**  
Carbon neutral facilities and services boost your competitive edge.
- **Service reliability and demand responsiveness**  
Increasing your level of self-sufficiency increases your independence.
- **Right for every baseline situation**  
We factor in your existing situation and build upon exactly that.
- **Custom solutions**  
We customize our net-zero energy-solutions for your requirements.
- **Agnosticism**  
We are impartial toward technologies, business partners and products.

