

SIEMENS

Industry Services

Energy-efficient Greenfield Services



Technology-based services for a greater competitive edge

Minimum downtime and the optimum use of staff and resources are key to sustainable success in industry. Siemens provides the basis for greater productivity, flexibility, and efficiency with technology-based services throughout the lifecycle of an industrial plant – reliably, globally, and around the clock. In-depth technology and product knowledge as well as industry expertise within Siemens' global network of experts ensure a considerable competitive edge.

The greatest opportunity to optimize the use of staff and resources exists during the design phase of a new plant. For this reason, Siemens brings you energy-efficient greenfield services.



The challenge

Constructing new production facilities is becoming an increasingly more challenging endeavor. Simply designing a plant to maximize product quality and quantity is no longer acceptable. Now customers want greener products, governments demand lower emissions, and energy prices continue to rise steeply. These social, regulatory, and economic pressures are forcing businesses to adopt vastly more complex plant designs.

Minimizing the entire plant's energy consumption and environmental footprint is an essential part of the design process. Siemens also understands how difficult it can be to balance the above-mentioned new constraints against core business objectives, and now provides a service to help you meet them.

www.siemens.com/ees

Identify & Assess	Evaluate & Conceptualize	& Design	Realize & Implement
<ul style="list-style-type: none"> Survey the existing project activity Interview key personnel Workshop the project objectives and requirements Define a project road-map 	<ul style="list-style-type: none"> Evaluate the project data available Define the evaluation criteria in cooperation with client Define the potential fields of activities Define a catalog of measures and their savings potential 	<ul style="list-style-type: none"> Prepare design documents and gather supplier information Align requirements with relevant personnel Define best practice plant operation Calculate the theoretical efficiency improvement compared to the "standard design" 	<ul style="list-style-type: none"> Make provision for technology and expertise Project manage and coordinate all suppliers Implement an energy data management system as required Report on project progress
✓ Objectives and requirements defined	✓ Implementation concept defined	✓ Savings measures designed & engineered	✓ Savings measures implemented

Energy-efficient greenfield services: enabling your most ambitious energy savings targets



Siemens has the largest environmental portfolio of products and services globally, and is ranked first on the Dow Jones Sustainability Index.

The solution

Siemens draws on over 15 years of consulting experience and its own sustainability excellence to bring you energy-efficient greenfield services. This service will allow you to optimize your new facility's energy efficiency along the whole energy chain – from energy supply through to final consumption. Elements of this essential service include:

- A baseline definition of the energy efficiency and greenhouse gas emissions of the production facility and an estimation of lifecycle costs
- Guidance on optimal process design through the application of design strategies that use energy efficiency as their core guiding principle
- A portfolio of significant and quantifiable energy-saving measures for smart energy investment decisions
- A special focus on measures that optimize the design of auxiliary energy systems, such as chillers and boilers
- A customized and cost-optimized energy supply concept

After the design phase, Siemens will support you through implementation to ensure savings success.

The benefits

With energy-efficient greenfield services, Siemens becomes your perfect partner for designing your new industrial facility. Siemens will work with you to achieve your company's business and sustainability objectives and to minimize the overall lifecycle costs.

Through its holistic approach and consideration of a wide range of technologies, Siemens has reduced the net energy consumption of plants by up to ten percent. Over the facility's life, this will amount to enormous bottom-line savings and greatly enhanced competitiveness.

Siemens will also reduce the planning efforts required through the application of virtual planning methods and by utilizing its extensive design expertise. In addition, Siemens will assist you in meeting environmental regulations and reducing your plant's emissions, which will enable your company to achieve higher sustainability ratings.

All product designations may be trademarks or product names of Siemens AG or supplier companies whose use by third parties for their own purposes could violate the rights of the owners.

Siemens AG
Industry Sector
Customer Services Division
Werner-von-Siemens-Str. 65
91052 Erlangen
Germany

E-mail: energyefficiency.industry@siemens.com

Order No. E10001-T430-A249-V1-7600 |
Dispo 21639 | K No. 20348 |
Printed in Germany |
TH 241-120641 | DB | 03130.5
© Siemens AG 2012