

The background of the advertisement is a composite image. On the left, there's a dark, mountainous landscape at night. In the center and right, a city is illuminated with lights, and a network of glowing lines and nodes is overlaid on the scene, representing data or energy flow. A prominent light trail from a road or path curves through the city. In the upper right, the Siemens logo is displayed in a white box. In the lower left, a teal box contains the main title and subtitle. At the bottom, a white box contains the website URL. The overall theme is digital technology and energy infrastructure.

**SIEMENS**

*Ingenuity for life*

## Identify and locate nontechnical losses

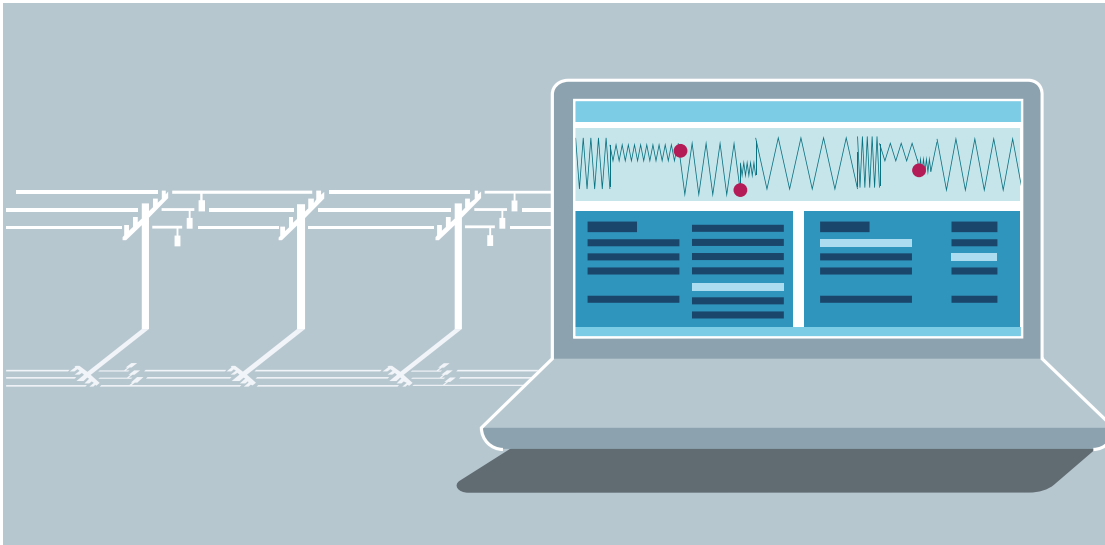
EnergyIP Analytics – Revenue Protection

[siemens.com/energyip-analytics](https://www.siemens.com/energyip-analytics)

The energy system is changing dramatically – posing new challenges, but also new opportunities to distribution grids. New demand patterns caused by the electric vehicle charging or the generation variability for example from residential photovoltaic installations, are becoming more dominant and has an impact on the reliability of the electric network. By rolling out an advanced metering infrastructure, we are now able to collect more data and use them to tackle the upcoming challenges. All the future opportunities lie in analytics. Transparency about generation and consumption, costs, and power quality is the key intelligence to make the right decisions and to design further use cases. That will pave your way to optimize grid efficiency and security as well as to create an additional value for your business.

Siemens has developed the right solutions for realizing this. EnergyIP is an extremely powerful, flexible, and scalable platform that easily handles millions of sensors – be it smart meter or others – and the huge volumes of data generated.

**EnergyIP Analytics – Revenue Protection** runs advanced analytics to identify and flag suspected cases of energy theft or any other nontechnical loss. Utilities benefit from the powerful combination of Siemens' deep expertise in the energy industry, cutting-edge data science, and analytics technology that provides immediate revenue recovery opportunities. The Revenue Protection analytics application is a complete solution that completely automates the business process for your revenue protection program and offers instant benefits and a fast ROI.



# EnergyIP Analytics – Revenue Protection

## Main benefits

### Facing sophisticated methods of electricity theft

Historically, utilities have spotted energy theft by examining bills from accounts recording zero or very low energy consumption. Site reports from meter readers and tips from the general public were another big source of leads for a utility's revenue protection team. In recent years, however, increasingly sophisticated methods of electricity theft have come to light. Traditional methods of detecting theft are no longer sufficient.

### Rich suite of algorithms

Revenue Protection is a rich suite of sophisticated algorithms that look for complex patterns in data to identify cases of energy theft. The system uses advanced data mining techniques to isolate "noise" or false alarms to more accurately identify genuine cases of theft or other non-technical losses.

### Perfect support for site investigators

The application automatically generates an investigation ticket for any service point where non-technical loss is suspected. An analyst from the Revenue Protection team has the opportunity to review any ticket, perform an online investigation through a set of powerful and intuitive tools, then authorize a site investigation to gather physical evidence and take corrective action. The site investigator can record the results of the investigation along with any photographic evidence. Documentation of evidence and investigation details is a key requirement for successful prosecution and revenue recovery in cases of energy theft. By incorporating these features, Revenue Protection maximizes revenue recovery. Revenue Protection also incorporates the results of these investigations into existing data mining models to further improve their accuracy and results over time, ensuring that you get ever-increasing returns from your investment.

### Plug-and-play custom algorithms

Big data analytics is usually a journey and not an event. Every open door enables new possibilities and Revenue Protection allows the plug-in of custom algorithms so that you can further explore and unlock the value of your own data.

### In the cloud or on-site

Revenue Protection can either be deployed on-site, on an existing system, or as a Software as a Service (SaaS) cloud model that integrates with available data sources.

Published by  
Siemens Industry Inc.  
100 Technology Drive  
Alpharetta, GA 30005, United States  
[usa.siemens.com/smartgrid](http://usa.siemens.com/smartgrid)

Article No. EMDG-B90008-00-4AUS  
Dispo 06200  
fb 7282 WS 0816

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