intertrust

Grid planning for the clean energy economy

Industry

Energy data tech companies,utilities, grid and smart city planners

Solution Intertrust CleanGrid[™]



Planning and collaboration are driving electrification

Utilities and grid operators are looking to revamp their grids with better ways for planning and implementing modern electrification initiatives. This is in part to compete in a rapidly expanding digital and electrification market but also to fix the issues with current electrical grids. Many of today's grids are designed around an obsolete centralized generation system that is difficult to scale against the needs of today's market and consumer.

To meet these challenges, utilities and grid operators need to partner and collaborate like never before with energy tech companies, analytics providers, system integrators to develop trusted data sharing methods and accelerated electrification planning. These new data sharing approaches are dependent on trust and data interoperability, as they aim to bring new efficiencies across the grid planning ecosystem.

Many factors are at play to bring electrification and often there is competition to get there first, to ensure funding, such as the EV charger infrastructure planning initiative. To qualify for the National Electric Vehicle Infrastructure (NEVI) Formula Program, states must demonstrate robust charging infrastructure and rapid and comprehensive DER planning capabilities.

Problems with today's grid and infrastructure

With the pressures and problems of climate change, new and more rapid means for planning and accounting for distributed energy and widespread electrification are needed. A transition is already underway to support this shift, however it is fraught with difficulties.

Today's monolithic infrastructure is fragile and difficult to change: it cannot keep pace with the new electrical demands being placed on it today and in the future, nor is there a means to rapidly plan and develop greater resiliency and capacity.

New requirements on existing electrical infrastructure are compounding these issues as they require proactive management–and additional data sharing, processing and cooperation from multiple parties. Energy data tech players, utilities, mobility providers, and system integrators need a way for secure, governed data collaboration to successfully make the clean energy transition.

Factors to consider and hurdles to overcome include risk management, guarding against breaches, complying with enterprise policy as well as privacy and data residency regulations-to name a few. What's more, new stringent data and planning capabilities are needed for those operators who seek to remain relevant and viable. Especially in the U.S., the race to modernize archaic infrastructure



is already being incentivized. NEVI is responsible for distributing up to \$7.5 billion from the Infrastructure Investment and Jobs Act with the goal of installing 500,000 EV charging stations nationwide by 2030. Only the states that meet all the requirements will receive the earmarked funding.

A better approach to grid modernization

Intertrust developed CleanGrid[™] to accelerate grid additions or upgrade plans, along with more rapid and collaborative approaches to infrastructure upgrades, like EV charging network planning, electrical grid data management, and regulatory management.

The CleanGrid toolkit allows developers to create applications to securely access, ingest, blend, and create new datasets for downstream presentation, collaboration, and analysis of today's grid.

While CleanGrid can be used out of the box with local data, users can also configure it as needed with a tailored UX and applications to mesh perfectly with utility data and mapping systems. datasets can be governed as required to protect, manage, and share data to comply with policies like GDPR. Toolkit applications address a variety of data scenarios, such as:



EV DataOps

Secure access to information for efficiently identifying ideal locations for EV charging stations; view local grid infrastructure information in real time, calculate potential EV charger installation costs, and understand the impact of new charging stations on the grid.



Grid DataOps

Ingest and share grid data in highly trusted and protected environments; including, DER interconnection planning, cost impact analysis, and planning for new energy loads.



Retail DataOps

Support the creation and operation of energy retail marketplaces operated by utilities or third-party energy retailers; offer secure management and sharing of customer permissions between solutions providers.

The CleanGrid advantage

Intertrust CleanGrid is a one-stop toolkit for building secure, trusted energy data applications. It can provide the whole energy ecosystem with electrification planning tools that enable rapid expansion into new markets and a means to revamp aging grid and energy technology.

Utilities and grid operators can leverage sensitive grid data to optimize asset planning, lower soft costs, and shorten project planning cycles-all with full compliance within a highly trusted, governed data environment.

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Building trust for the connected world.

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