Knowledge Transfer Project
Cultivating Smart Energy Solutions through Dynamic Peer-to-Peer Learning

As energy policy makers and professionals convene in the Öresund region for the 9th Annual Clean Energy Ministerial (CEM9), the global community is as united as ever around the common goal of accelerating the transition to global clean energy.

Through sustained collective effort and thought leadership, CEM partners and stakeholders are systematically addressing the barriers to the widespread deployment of clean energy technologies. Pivotal to their progress is the efficacious sharing and dissemination of knowledge.

To address that need, the CEM initiative International Smart Grid Action Network (ISGAN) launched the Knowledge Transfer Project (KTP) in March 2016. Funded by the U.S. Department of Energy and the Swedish Energy Agency, the KTP aims to capture, collect, and share knowledge about smart grid technologies among countries and key stakeholders.

Deep Dialogue, High Impact
Building on ISGAN’s experience with delivering deep-dive workshops, the KTP fosters meaningful international dialogue on smart grids with a focus on developing competence and building capacity.

The workshop format, which requires significant advance preparation, promotes individual learning while emphasizing active participation in the co-creation of concrete results informed by an interdisciplinary group of carefully selected participants with complementary competencies. Informal and collaborative, KTP workshops:

- **Encourage open dialogue** about successes and lessons learned from grid modernization efforts
- **Promote cross-organizational dialogue** inspired by experiences and results achieved
- **Create a forum for peer-to-peer learning** where all participants can contribute to and benefit from the collective thinking process.

The intent is to produce greater impact than traditional, presentation-based conferences. Aside from the mutual transfer of smart grid knowledge, which is the primary purpose, the KTP concept also creates strong social fabrics of peers across disciplines and international borders.
Flexible Options to Maximize Smart Grid Knowledge Transfer

After a successful 2016 pilot project and two consecutive projects, each with a different focus and structure, the KTP has become an established practice that can support existing ISGAN or CEM initiatives. The organic, flexible approach to workshop development enables organizers to tailor the preparatory activities, workshop design, and facilitation techniques to the specific objectives of each KTP. To accommodate different purposes, needs, and practical circumstances, ISGAN has adopted three basic models for delivering KTP workshops.

Country-Centric KTP Maps Strategy for Mexico

The country-centric model is exemplified by ISGAN’s August 2016 pilot, “Unleashing Smart Grids in Mexico,” co-hosted by the 21st Century Power Partnership in Mexico City. Focused on the goals of Mexico’s Ministry of Energy, this KTP aimed to unite key national stakeholders around a common vision and road map for smart grid development inspired by the experience of other ISGAN countries. It was organized in three parts: a preparatory meeting to brief international experts about the status of smart grids in Mexico, an interactive workshop to foster knowledge exchange among invited participants, and a public conference to inform the wider smart grid community. Each segment engaged experts and practitioners from multiple countries in providing advice and support based on Mexico’s circumstances.

Multilateral KTP Targets Common Need to Boost Public Support for Smart Grid RD&I

The multilateral model is exemplified by the KTP that culminated in a workshop in Genk, Belgium, in September 2017. Driven by a common need among all participants, this project spanned several months and focused on strategies and tools for effective design and execution of national smart grid research, demonstration, and innovation (RD&I) support structures and programs. Inputs and outputs included two pre-workshop surveys and a report summarizing responses, a one-day workshop, a post-workshop report for participants, and an executive summary for wider circulation.

Hybrid KTP Applies Global Lens to India’s Priorities

The hybrid model is exemplified by the three-day KTP held in Bengaluru, India, in November 2017. Organized by ISGAN in partnership with the National Smart Grid Mission of the Government of India’s Ministry of Power and the Central Power Research Institute, this KTP focused on distributed generation, microgrids, and smart metering. While inspired largely by India’s priorities, it explored them from a global perspective through multidirectional knowledge sharing. This KTP included a networking day and site visit, a high-level conference, and an interactive workshop. Designed to identify effective ways for public and private sector stakeholders to enable smart local grids, the workshop was structured around three objectives: identifying and prioritizing challenges, sharing experiences and lessons learned, and generating concrete ideas for solutions and actions.

KTP Team Seeks New Ideas, Partners

The ISGAN KTP team is actively seeking new ideas and partners for future KTPs. Along with the approaches outlined above, there is an option for a more comprehensive KTP consisting of three to four workshops with intermittent analytical work carried out by participants over several months. To inquire about planning or participating in Public Support to Smart Grid RD&I 2.0 or other KTPs, visit iea-isgan.org/knowledge-transfer-project or contact:

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To learn about becoming a member of ISGAN, visit ISGAN@ait.ac.at.

Sample output of the Mexico KTP, which was structured around three exercises: 1) Vision, 2) Milestones, 3) Actions and Roles

VISION 2: MORE RENEWABLES
With adequate integration to handle variability

MILESTONE 6
2017–2024: Flexible transmission & distribution with automatized data (e.g., SCADA) and controls

Action
Power quality technologies incorporated on the distribution side

Action
Full monitoring and control of the transmission system by 2024

Action
Put forward the proposal on PMUs to possibly a full deployment by 2020

Action
Upgrade grid codes by 2018 based on international standards and practices

Action
Leverage current investments and achieve a better transformation of the grid

Public Support to Smart Grid RD&I 2.0
Date/Location
18–19 October in conjunction with ExCo 16 in Vienna, Austria (preparatory work begins May 2018)
Purpose
Tackle select prioritized topics from Genk workshop in depth

ISGAN
INTERNATIONAL SMART GRID ACTION NETWORK
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