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नीति आयोग  
National Institution for Transforming India

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2<sup>nd</sup>  
**International  
Conference Workshop**

*on*

**Energy Innovation Initiatives for Attaining  
Sustainable Development Goals**

**Dehradun, India**

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**13<sup>th</sup> – 15<sup>th</sup> February 2019**

EIISDG 2019: <http://eiisdg2019.upes.ac.in/>





In the gracious presence of



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Member, NITI Aayog

Distinguished Speaker



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## About the conference workshop

The 4<sup>th</sup> "Sustainable Energy for All" forums held in May 2018 at Lisbon, Portugal concluded that the energy systems imaginations requires a significant shift.

*"...the sustainable energy systems of the future are no longer just about electrons, but about energy as a set of services that deliver prosperity, reliable health care, education and business opportunities. We understand now that the energy systems of the future are so fundamentally different from the energy systems of the past that they require a re-imagining of the institutions, business models, financing and partnerships necessary to deliver SDG7 on the timeline laid out."*

The inaugural "Eradicating Poverty through Energy Innovation" (EPEI) workshop held at Arizona State University in February 2018, arrived at similar conclusions, proposing that energy thriving should be the broader goal of achieving SDG7 i.e. Clean and Affordable Energy for All. Deliberating around the concept of Social Value of Energy; innovation in socio-technical-financial arrangements as well as governance and ownership of energy access projects were explored by a global cohort of participants. The contextual factors of geography, climatic conditions, economy, institutional strengths or weaknesses and culture etc. emerged as crucial factors for achieving desired outcomes. Social justice, equitable distribution of benefits, and inclusive development emerged as strongly interlinked issues.

To continue the sharing and dissemination of the concept of social value of energy various workshops around the world have been envisioned. These workshops will explore contextual themes and challenges in creating meaningful bankable projects and programs for energy sufficiency that are financially viable, while generating social value for local communities which will lead to energy thriving. **University of Petroleum and Energy Studies**, located in Dehradun, Uttarakhand, a Northern state of India, under the aegis of **NITI Aayog** and in association with **Arizona State University, USA** and **IPE Global, India** is hosting this conference workshop. The conference workshop is supported by **Cairn India** and is focused to attempt to meet SDGs through energy intervention and the expected outcomes will prove to be good drivers for underdeveloped and developing countries.



CLEAN THE WORLD



# OBJECTIVES & OUTCOMES

Innovative energy initiatives are being planned and implemented all the time, but one can always find a disconnect between well intended plans/policies and effective implementation, scalability, sustainability and financial viability. The primary motivation of this workshop is to bridge this gap by **bringing together the participants from various domains of policy, financing, implementation, research and practice around energy systems.**

Participants in the workshop will deliberate on **five major objectives:**

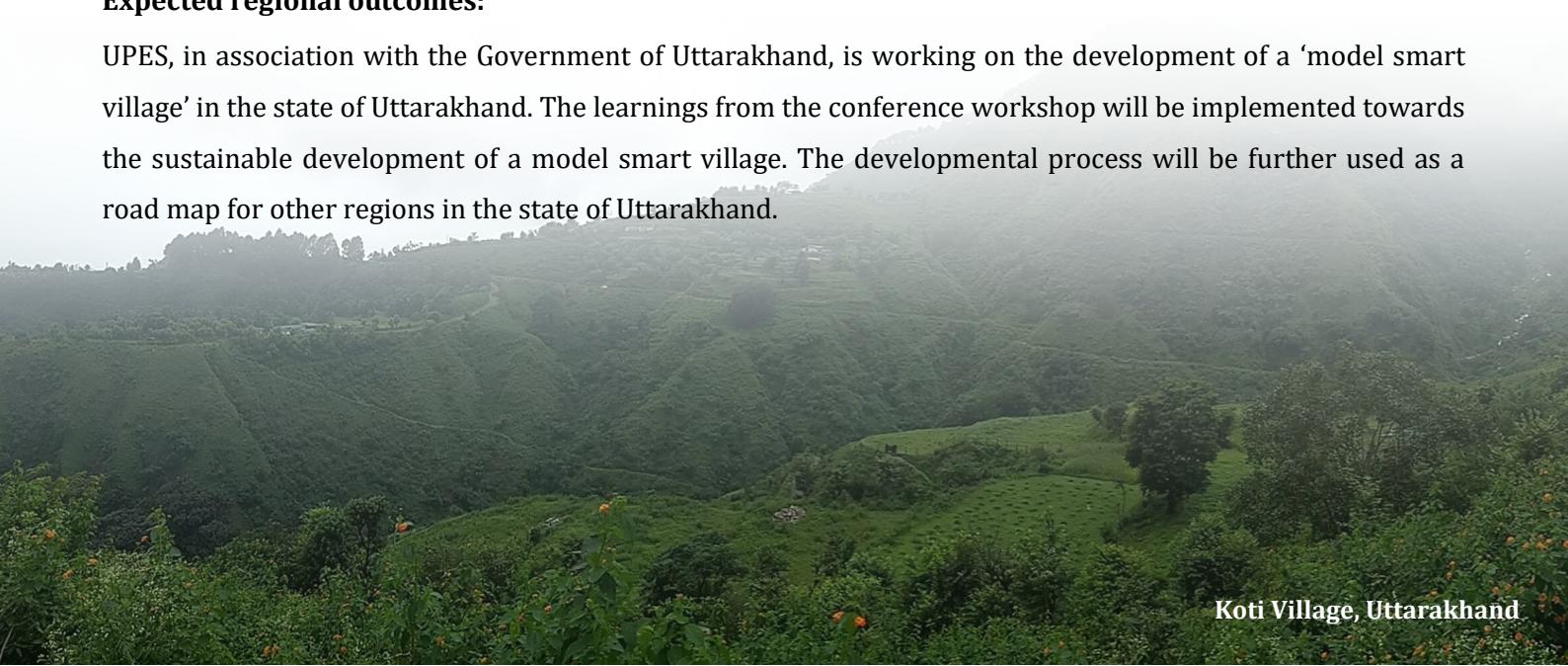
1. To assess existing projects/programs on basis of how they use energy as enabler to attain SDGs (issues of equality, justice, climate adaptation, poverty alleviation etc.).
2. To deliberate on potential initiative (s) that are currently in the conceptual phase or in relatively early planning phases in order to identify and incorporate social value of energy parameters in their strategic plans.
3. To deliberate critical factors necessary to make ensure such initiative (s) are scalable, sustainable and financially viable.
4. To share best practices as well as failures from around the world in energy initiatives undertaken, with focus on South and South East Asia.
5. To deliberate how such initiatives could support achieve India's and host state Uttarakhand' s ambitious targets towards energy innovation in a socially and financially cohesive manner.

**Expected global outcomes:**

1. **Position papers** representing the collective knowledge of the group on the thematic areas are expected to materialize and release them at appropriate platforms after the workshop, ensuring communication to a wider audience.
2. **Draft white paper** for host State Uttarakhand to achieve its energy innovation policies and targets.
3. A multi-disciplinary, global **think tank** is expected to be emerged from this conference workshop that continues to collaborate through follow-up events, intellectual exchanges and joint projects.
4. **A focused group of experts** that are readily available to support **host State Uttarakhand** in its journey towards energy innovation.
5. **Practical guide** for design and financing of a socially responsible energy innovation project.
6. Ideas for future workshops, joint proposals shall be invited from current participants and interested stakeholders.

**Expected regional outcomes:**

UPES, in association with the Government of Uttarakhand, is working on the development of a 'model smart village' in the state of Uttarakhand. The learnings from the conference workshop will be implemented towards the sustainable development of a model smart village. The developmental process will be further used as a road map for other regions in the state of Uttarakhand.



# THEMES AND DRIVING QUESTIONS

The United Nations' Sustainable Development Goals aim to steer global initiatives towards eradicating poverty, protecting the planet and ensuring prosperity for everyone. Energy innovations are fundamental to achieve a majority of these goals. However, technological focus in energy access alone is inadequate to address what is essentially a complex socio-technical-financial challenge of sustainable energy futures. Deeply embedded political-economic structures, associated variabilities with gender, ethnicity, language and geography, and issues around sustainability and financing make the process of attaining SDGs highly subjective and uncertain.

This conference workshop is organized with the aim to rethink social values of energy, in the context of the social, ecological, technological and financial realities of the South Asian and South East Asian region. Given the fact that a fifth of human population lives in this region and nearly 37% face poverty challenge, coupled with effects of climate change such as common and disruptive extreme weather conditions affecting energy access and usage, an adaptive energy infrastructure is critical for resilient and prosperous communities. Further, given India's ambitious targets towards renewable energy (175 GW by 2022) the workshop would contribute with ideas, suggestions and way ahead for achieving the same in socially and financially cohesive manner.

Acknowledging the urgent need for sustainable development future for South Asia and South East Asia and to achieve meaningful progress in meeting the SDG's, the 2<sup>nd</sup> International Conference Workshop is being organized around the theme:

## **"Energy Innovation Initiatives for Attaining Sustainable Development Goals"**

Aligned with the broad theme are questions pertaining to:



**Implementing SDGs:** What are the roles and policies needed? What are the barriers to overcome?



**Designing the future:** How will creation of an enabling environment contribute towards long term sustainability of energy technological interventions?



**Educating citizens in skills and competencies related with SDGs:** Which education institutions can be identified, prioritized and supported for building SDG skills and competencies for citizens?



**SDGs and social engagement:** How can energy innovation be aligned with social needs to address the challenge of technology adoption among the masses?



**Financing energy:** What works and to what extent when implementing SDGs at global, national and local levels of governance?



**Ownership Models:** What kinds of ownership models for energy innovation can contribute towards sustainable energy for all?



**Regulations, policy, legal and financial challenges:** What limits community entrepreneurship in the implementation of SDGs, and how can those limits be lifted?



The community of energy innovators and thinkers interested in these thematic areas is broad and spans across entrepreneurs, businesses, governments, academia and social groups. Four sub-themes have been identified to facilitate a constructive cross-cutting dialogue and exchange of ideas:

- ◊ **Social value of energy innovation** in attaining UN SDGs for marginalized communities.
- ◊ Engaging communities in **imagining sustainable futures** and assessing the role of energy innovation in achieving them.
- ◊ Role of **innovative grassroots energy enterprises** in supporting sustainable well-being of communities.
- ◊ **Policy, governance and financial mechanisms** to facilitate scaling up of grassroots energy enterprises that enhance sustainable well-being and foster grassroots energy innovation.

**Participants will deliberate and share ideas based on their research and experiences. Small working groups will be formed during the workshop, documenting the ideas and approaches. These will be shared and supplemented by posters, short talks, and panel discussions by experienced participants who are representatives of the diversity of knowledge systems in this arena and area.**

## Who Should Participate!

- ◊ Policy Makers
- ◊ Consultants & Project Implementers
- ◊ Industry
- ◊ Multilateral & International Organizations
- ◊ Philanthropic organizations
- ◊ Corporates and business groups
- ◊ Academia & Research Institutes
- ◊ Financing Agencies
- ◊ Energy advocates
- ◊ Non-profits/ NGOs



# Conference Workshop Format



## Keynote sessions

Selected speakers will deliver keynote talks on their experiences, challenges and achievements revolving around the central theme of the conference workshop.



## Entrepreneurs/Expert Panel

A tone setting activity ,with a set of creative entrepreneurs/experts who will share their journeys and insights, followed by moderated discussions.



## Facilitated Discussions

In the spirit of collaborative knowledge creation, practitioner(s) will present an emerging concept and invite constructive comments from the participants.



## Roundtables

Small groups of 5-7 members, with diverse backgrounds and expertise, will be formed. Participants may choose to take on an additional role of moderator/rapporteur. The ideas emerging from these intensive discussions would form



## Poster sessions

An opportunity for the participants to present their research and initiatives in the form of posters, and to engage with other participants through individualized exchanges.



## POWER talks

A short, informal and quick sharing of innovative and impactful work carried out in different regions of the world. These talks would showcase unique challenges and outcomes.



## Networking breaks

A platform for participants to enable a two-way exchange of thoughts and ideas with their global peers.



## Show and Tell Sessions- Products

A platform for innovators and entrepreneurs to demonstrate their products/prototypes/models to gain visibility and inputs from global experts.

## Contact Information

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