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ABSTRACT

This editorial introduces the 28th volume of the International Journal of Sustainable Energy Planning and Management. This volume is probing into the actors engaged in energy renovation, rural district heating in Hungary, and hydropower expansion on the Indonesian island of Sulawesi. Other work address power-to-gas technology and some of the obstacles facing this technology, pine needles and hydropower as sources of renewable energy in Himalaya, how adaptive pricing can influence electricity demand and thus energy system performance, and finally community participation in renewable energy in Tanzania.

Keywords:

Renovation actors;
Rural heating;
Hydro expansion;
Power-to-gas barriers
Biomass;
DSM incentives;

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Contents

In *Energy efficiency in the building sector: a combined middle-out and practice theory approach*, Reindl & Palm [1] investigate processes surrounding energy conservation projects in buildings with a focus on the knowledge of the professionals. One of the interesting findings is how tacit knowledge is not questioned. This work links up to another interesting study also focusing on the procedures and actors in the energy renovation process [2].

Csontos et al. investigate the prospects of rural renewable energy-based district heating in their article *Spatial analysis of renewable-based hybrid district heating possibilities in a Hungarian rural area* [3] as a means to address import dependency, energy poverty, and air pollution. In their analyses, the authors find good prospects in rural settlements.

Tumiran et al. [4] look into expansion planning of hydropower on Sulawesi, Indonesia, finding that an expansion of up to 30% penetration is feasible in this case.

In their article *The role of inter-organizational innovation networks as change drivers in commercialization of disruptive technologies*, Csedő & Zavarkó [5] investigate how some of the main barriers to the power-to-gas technology may be overcome. The barriers—“*perceived risks associated to its scalability*” as well as costs can be addressed at more levels, however here the authors suggest amongst others “*the establishment of regulatory sandbox models*” for the development of the technology.

Malik et al. [6] investigate the use of pine needles as a source of biomass in the Indian Himalayan region, in different constellations with wind, photo voltaics (PV) and grid electricity finding the optimal solution under local circumstances to being a combination of gasifier run on one needles and PV panels. The scenarios were analysed using the Homer model.

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In “*A planning perspective on Hydropower Development in the Indian Himalayan Region*”, Singh [8] puts another

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focus on the Indian Himalayan region's role as a potential renewable energy source provider. In India, more focus is given other renewable energy sources like wind and photo voltaics, but the potential is large and more focus would benefits the technology's utilisation.

Cepeda et al. [8] investigate the role of demand side management activities in stand-alone microgrids, testing how incentives and penalties applied to electricity tariffs may impact their temporal demand curve. Results show a lowered cost of energy as one of the impacts on the energy systems.

Finally, Bishoge et al. [9] address community participation within renewable energy in Tanzania. The links go both ways with the exploitation of renewable energy sources proving income and employment opportunities – but community participation is also a facilitator for deployment.

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