
Principles of Smart Energy Path (SEP): Draft Summary

The **Energy, Ecodevelopment and Resilience in Africa (EERA)** project, initiated by HELIO International with financial support of Climate and Development Knowledge Network (CDKN), aims to identify the conditions for a Smart Energy Path (SEP) in Togo, Mali, and Bénin, which will support the development of bankable energy projects, and strengthen the capacity of national energy experts in defining the strategic steps of a SEP, gathering available knowledge and know-how. The accompanying manual for the development of a SEP is in preparation and will be available in 2014. This paper presents some key elements.

Definition.

Smart Energy Paths (SEPs) refer to an approach to energy planning that aims to meet peoples' needs and aspirations while at the same time being compatible with environmental sustainability and participatory governance. They use smart energy technologies¹:

1. They rely on renewable energy flows;
2. They are diverse, that is to say the energy supply is an aggregate of many individually modest contributions; each designed for maximum effectiveness in particular circumstances.
3. They are flexible, and relatively low technology – which does not mean unsophisticated, but rather, accessible and easy to understand and use without uncommon skills.
4. They are matched in scale, geographic distribution, and energy quality to meet end-use needs, in order to take advantage of the free distribution of most natural energy flows.

A perspective based on energy service needs.

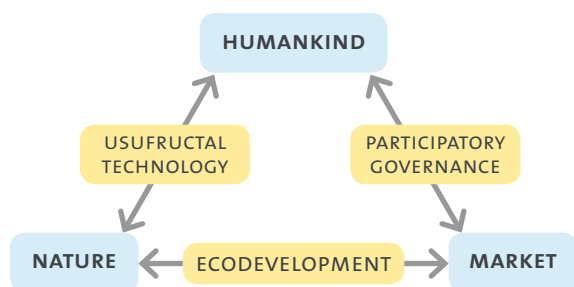
We value energy not for its own sake, but for the role it plays in providing the things we really value: heat for cooking, motive force for transportation, light to read, refrigeration to store food and medicine, power to ease the burden of human labour, operation of all the devices used for communication and entertainment that run on electricity. This focus on energy services is a profoundly different way of looking at the energy system than regarding it as the production and consumption of aggregate quantities of fuel and electricity.

Backcasting: a goal-oriented energy planning.

Backcasting involves imagining a future and then planning a way to get there. In smart energy planning, future supplies of fuels and electricity are not forecasted or predicted, but are “backcasted” from a future date for which targets and goals have been set for key indicators.

1. Originally defined by A. Lovins, 1977. “Soft Energy Paths: Towards a Durable Peace”. Ballinger, Cambridge, p.38-39.

Link with TIPEE indicators and the Millennium Development Goals (MDGs).



Humans, utilising usufructal technologies use natural resources; through participatory governance, markets are controlled and regulated. It is through these processes and interactions that ecodevelopment is achieved. (Source: HELIO International)

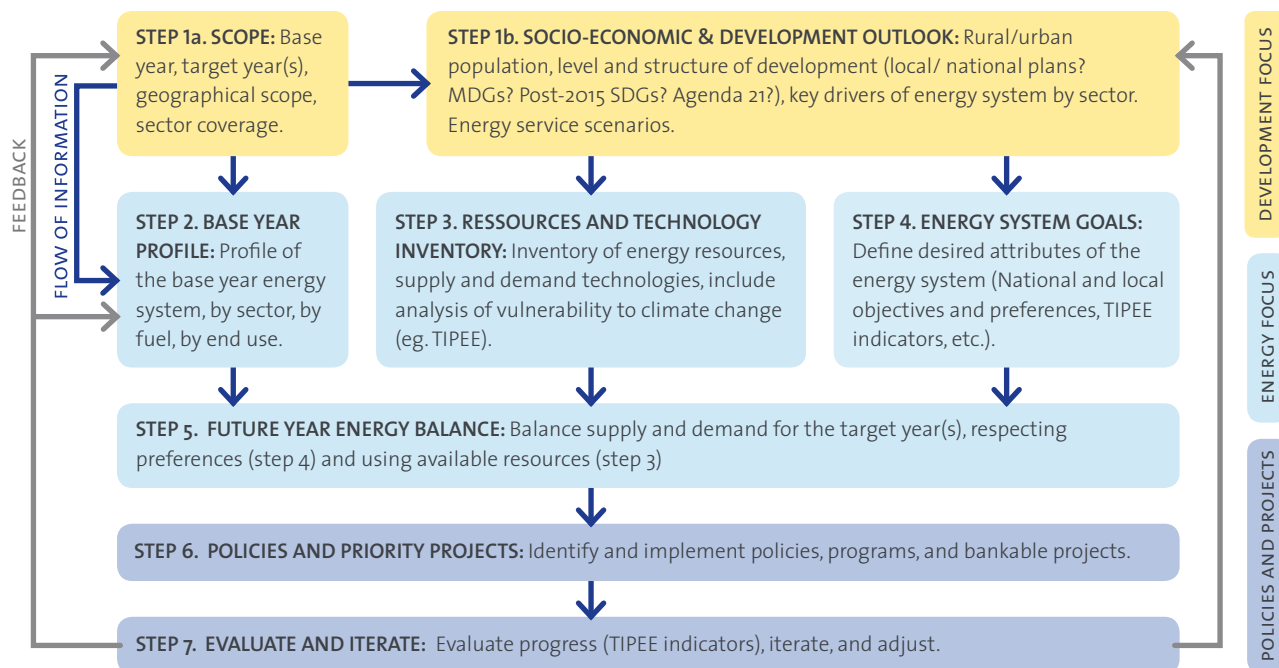
HELIO International has developed the TIPEE© methodology and indicators (“Processing Information for Energy Policies Conducive to Ecodevelopment” <http://www.helio-international.org/projects/TIPEE.cfm>) for measuring progress toward energy policies for ecodevelopment. These indicators are fully compatible with the SEP approach.

Although none mention energy directly, energy is required to achieve many of the MDGs. The SEP methodology will therefore facilitate the achievement of the MDGs.

A multi-sector and multi-stakeholder team.

SEP planning requires both technical expertise and interpersonal skills to insure an active stakeholder participation. All these actors are grouped into “seven families” directly or potentially affected by the development of energy policies and strategies: public institutions, energy utilities, energy service and technology providers, users, mediators (NGOs, universities, unions, etc.), national funding agencies, international funders. They are part of a multi-sectoral committee liaison accompanying the entire process.

A seven step process.



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