

### TIPEE<sup>®</sup>: what is it?

TIPEE is a tool that helps decision-makers use readily available information to devise better energy decisions. It is a methodology and a series of indicators that can be used to check how well national energy policies are contributing to ecodevelopment under fluctuating climatic conditions.

### TIPEE Methodology: what does it measure?

Twenty-four indicators have been carefully selected to cover the central elements that should be looked at when developing an energy policy in-line with ecodevelopment (sustainable and equitable development).

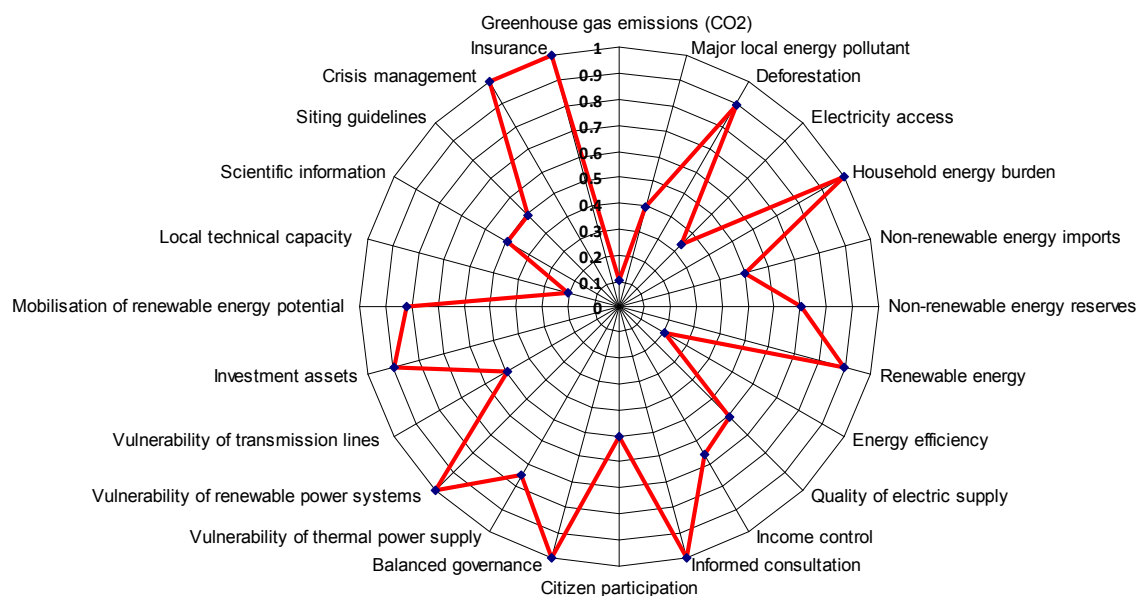
Environment	Indicators	Parameters
Indicator 1	Greenhouse gas emissions (CO <sub>2</sub> )	Greenhouse gas emission (CO <sub>2</sub> ) from the energy sector
Indicator 2	Major local energy pollutant	Concentration or emission level of a significant energy-related local pollutant (CO, NO <sub>x</sub> , or SO <sub>x</sub> particulates) per capita
Indicator 3	Deforestation	Number of hectares of deforestation or loss of forest vegetation (biodiversity) used for energy purposes
<b>Social</b>		
Indicator 4	Electricity access	Number of households that are electrified
Indicator 5	Household energy burden	Proportion of household income spent on energy services
<b>Economy</b>		
Indicator 6	Non-renewable energy imports	External energy dependence
Indicator 7	Non-renewable energy reserves	Number of days of stock of non-renewable energy supplies
<b>Technology</b>		
Indicator 8	Renewable energy	Deployment of modern, local renewable energy
Indicator 9	Energy efficiency	Energy intensity of industry; GHG emissions per unit of production; or energy intensity of the economy
Indicator 10	Quality of electricity supply	Length and recurrence of power cuts and variations in voltage
<b>Governance</b>		
Indicator 11	Income control	Reduction in the share of energy revenues that escape taxation
Indicator 12	Informed consultation	Public hearings and consultations on the impact assessments of proposed energy projects
Indicator 13	Citizen participation	Active participation of civil society (particularly women) in the energy sector
Indicator 14	Balanced governance	Balanced representation of energy demand and supply stakeholders as well as transparency in the decision-making process
<b>Vulnerability</b>		
Indicator 15	Vulnerability of thermal power supply	Vulnerability of power plants (and refineries if applicable) to flooding
Indicator 16	Vulnerability of renewable power systems	Vulnerability of renewable energy systems to climatic variations
Indicator 17	Vulnerability of transmission lines	Length of transmission lines/distribution networks threatened by extreme weather events
<b>Resilience</b>		
Indicator 18	Investment assets	Rate of domestic savings/GDP
Indicator 19	Mobilisation of renewable energy potential	Proportion of national investment earmarked for renewable energy and energy efficiency
Indicator 20	Local technical capacity	Annual number of science and engineering graduates per total population
Indicator 21	Scientific information	Availability of risk maps (flooding, desertification, contamination)
Indicator 22	Siting guidelines	Climate-proofing guidelines for power plant siting and building
Indicator 23	Crisis management	Emergency plans for power plants
Indicator 24	Insurance	Availability of domestic insurance policies that account for climate change-related damages

## Indicator Analysis: is there progression or regression?

Collectively the indicators assess a country's success in reducing its energy footprint. Over time the indicators can reflect real progress towards a national energy system that promotes improved health and well-being under changing climatic conditions.

TIPEE defines a set of sustainability targets. These are not absolute, as nobody knows what constitutes long-term viability given diverse national circumstances. Rather these targets serve as a series of reference points to see how well a country is progressing (or regressing).

Graphing the indicators gives a visual representation of a country's current energy footprint.



The desired value is 0, which indicates a very low footprint whether it be from an environmental, resource use or vulnerability perspective.

## Why this focus?

Energy is central to our existence; however energy's ubiquitous nature means that it is too often "ignored" when it comes to developing adaptation activities. Without a good supply of energy we, as humans, would find it extremely difficult to survive, let alone prosper. In a climate-constrained environment, the question therefore becomes how to climate-proof energy systems and policies while also meeting other goals such as maintaining a healthy ecosystem, achieving development priorities and improving the overall quality of life for all citizens.

The TIPEE approach has **already been applied in Cameroon and Togo.**

Results from this work are available on the HELIO website. [www.helio-international.org/projects/TIPEE.cfm](http://www.helio-international.org/projects/TIPEE.cfm)

## More information?

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