

### 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?

The 24 TIPEE 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).

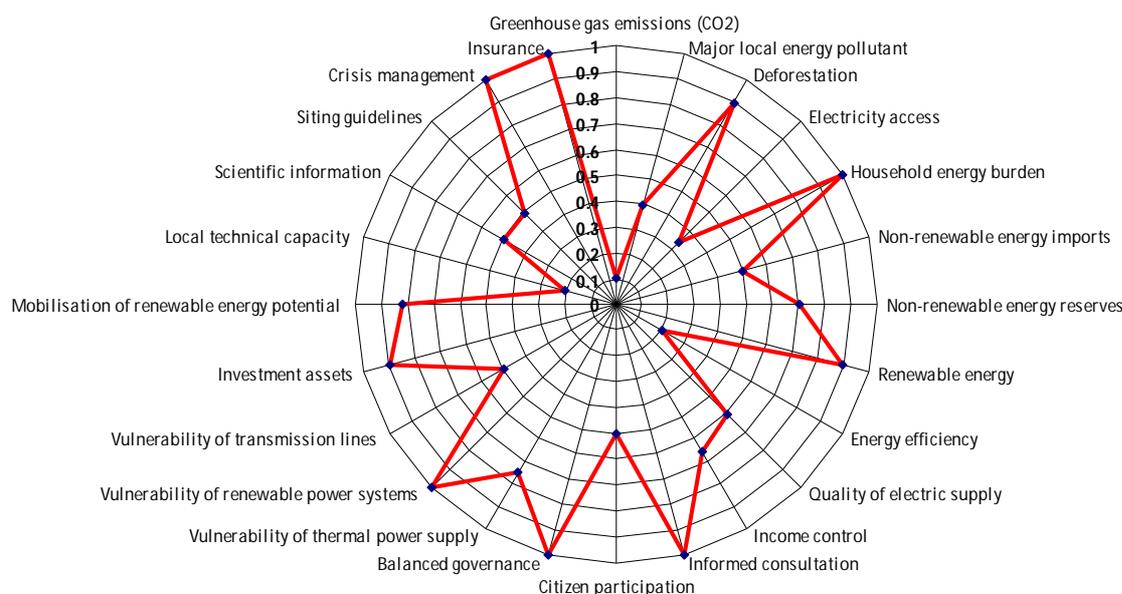
| Environment          | Indicators                                  | Parameters  |
|----------------------|---|---|
| Indicator 1          | Greenhouse gas emissions (CO <sub>2</sub> ) | Greenhouse gas emission (CO <sub>2</sub> ) from the energy sector   |
| Indicator 2          | Major local energy pollutant                | Concentration or emission level of a significant energy-related local pollutant (CO, NO <sub>x</sub> , 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; or 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 frequency changes   |
| <b>Governance</b>    |   |   |
| Indicator 11         | Income control                              | Reduction in the share of revenues from energy that escapes taxes   |
| Indicator 12         | Informed consultation                       | Public hearings and consultations on the impact assessment 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/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 energies and energy efficiency  |
| Indicator 20         | Local technical capacity                    | Annual number of sciences and engineering graduates per total population  |
| Indicator 21         | Scientific information                      | Availability of risk maps (flooding, desertification, contamination)  |
| Indicator 22         | Siting guidelines                           | Climate-proof guidelines for power plants 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 progress 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 an actual long-term viability given the diverse national circumstances. Rather they 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, resources 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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