Energy Evaluation 2022

EnDev Results factors

A methodology for considering additionality and sustainability aspects in results monitoring of energy access projects

DANISH ENERGY MANAGEMENT
DEM
FOR SUSTAINABLE IMPACT

EnDev: A flagship energy acces programme

- Started as a Dutch-German collaboration in 2005 focused on MDG-energy target achievement

- Is a multi-donor program today (DGIS, BMZ, NORAD, SDC) with RVO and GIZ as co-managing organizations, and approximately 10 different organizations implementing EnDev in 20 developing countries

- In addition, EnDev has 'associated programmes'

- EnDev plays a large role in global initiatives: ESMAP, Clean Cooking Alliance, etc.

EnDev Results factors

- Since the beginning in 2005, EnDev has provided robust quantitative outcome data focusing on "real" access to energy: Observed results are modified using factors

25,800,000 people

have access to modern energy services

81,700 micro, small and medium-sized enterprises

grow their businesses through the productive use of energy

30,900 social institutions

including 18,660 schools and 2,135 health centres are supported with a modern form of energy

31,899 jobs

are created as a result of EnDev support

- New "results factors" is a continuation of a tradition. The aim of the revision of the factors is to have a more simple and standardised approach
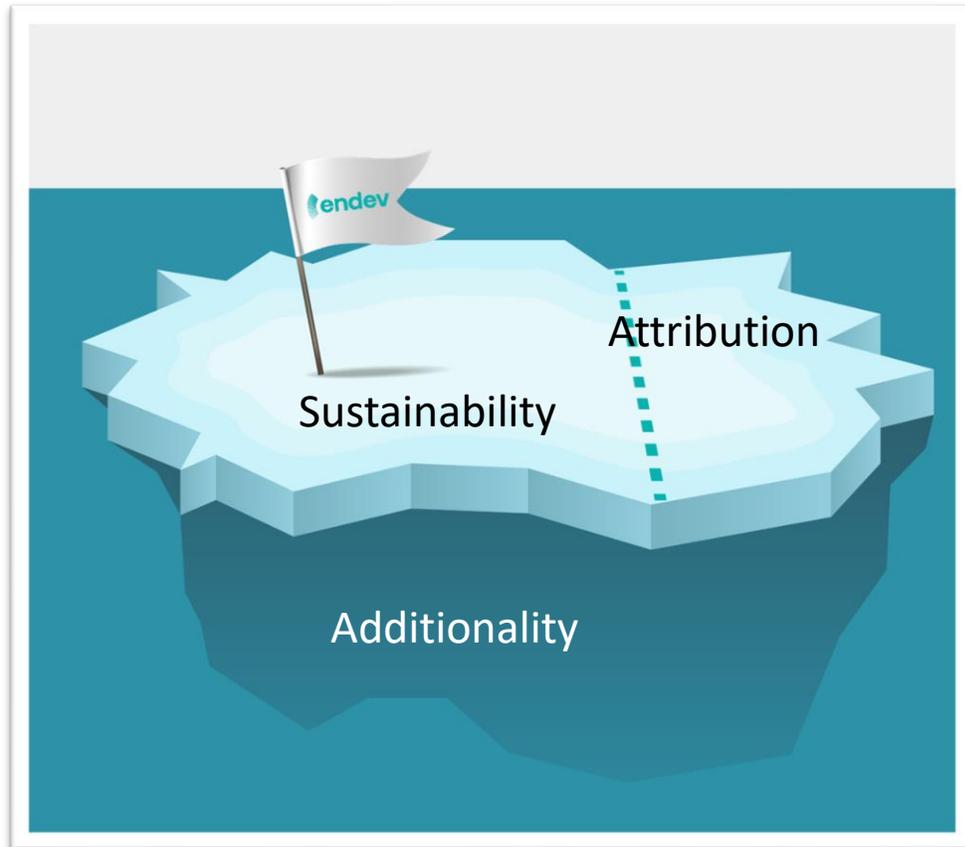
Additionality, sustainability, and attribution in general

- Result factors reflect hard questions:
  - Is our intervention sustainable?
  - Is it additional?
  - Are we making a change?

- This is not unique to EnDev, but few donors take these aspects into account in the quantitative results as EnDev does.

Figure: Illustration of when these concept are considered in standard international practice
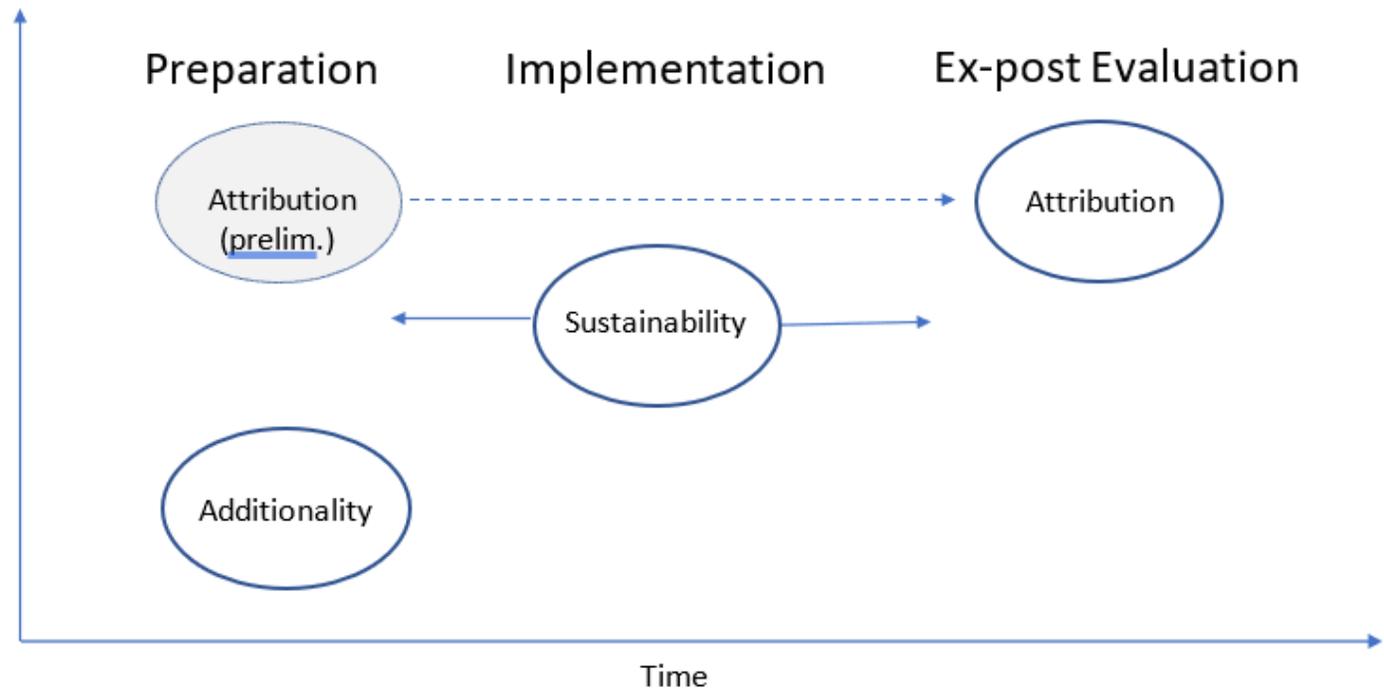
# Ice plate metaphor for the new results factors

- Sustainability = How many has access five years after first use? **Can be observed/measured**

- Additionality = How many would not have gained access anyway? **Is counterfactual, can only be estimated**

- Attribution = How big a share of the result is EnDev's and how much is due to another donor? **Pro-rata share**
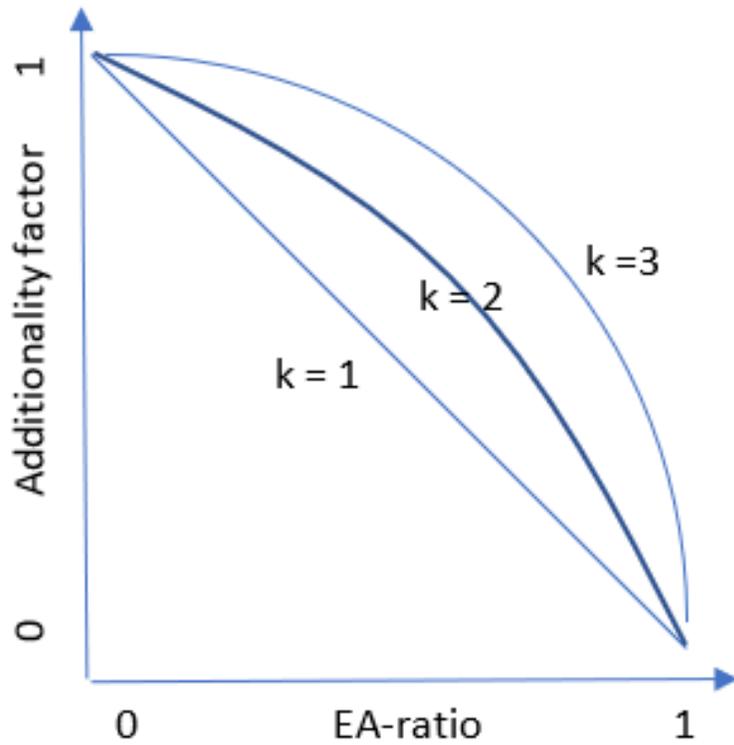
Main attributes

1. Each factor represents a combination of several aspects

2. Operational definition: "Five years after first use"

3. MTF-tiers play an important role: New and improved access counts

4. Two approaches: Default (fast) or Project specific (accurate)

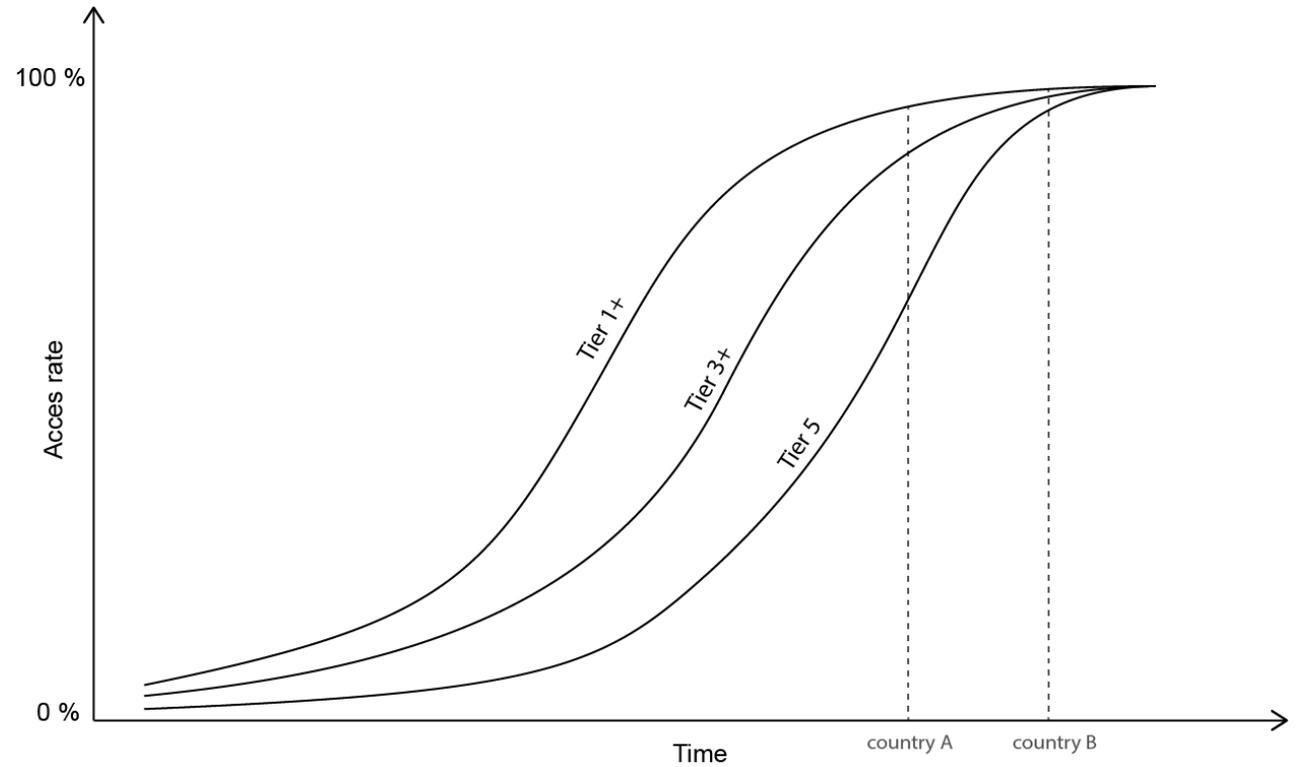5. Limited detail: One decimal only / 10%-steps only

Sustainability
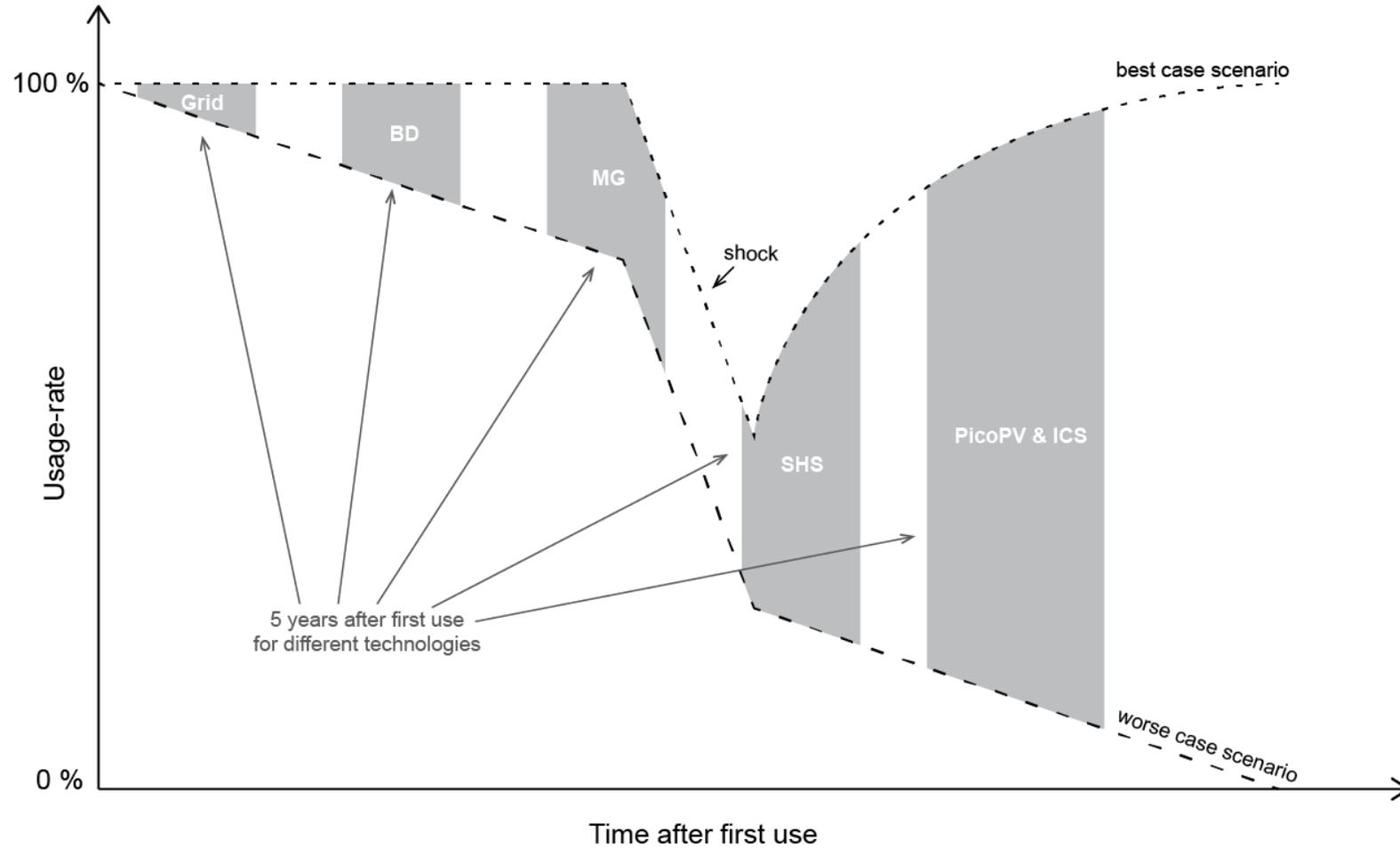
Additionality

$$y = 1 - x^k$$

Attribution

- Has to do with partnerships: No programme is an island
- Only partnerships with other donors are considered in this factor -> national partnerships are taken for given
- Definition: The share of end users that has gained access to energy entirely due to EnDev's support after the contributions of other development partners have been deducted
- Pro-rata share that can be calculated as either:
  - EnDev financial contribution / total financial contribution to project or assistance given to market actors
  - Number of end users reached without partnership with development partner / Number of end users reached in project

Attribution and indirect results

- As a programme that works in partnerships, it is sometimes difficult to separate EnDev results from others'

- Examples:
    i.   Support to market partners (companies) lead to improved results not only concerning the technologies promoted by Endev, but also to other solutions
    ii. Support to market partners lead to results outside the intervention zone
    iii. Results are achieved some years after support is given: How to handle this question when projects are handed over to other donor programmes?

- There are special attribution factors for these indirect results.

- Indirect attribution factors are based three types of boundaries:
    - Time, Geography, technology solution+quality

- Conditions
    - The market partner also creates direct results
    - Justifying narrative/explanation
    - Indirect attribution factors go both ways

Concrete examples of indirect attribution factors

- RBF program for biodigesters:
  - Companies and models accredited
  - Business- and marketing training
  - Results based support to sales of approved models

- Situation
  - Company sells more BDs, but not many of the EnDev models because demand changes

- Indirect result
  - ✓ Same market partner (the company)
  - ✓ Justifying narrative
  - ÷ Outside technological boundary (partially)
  - ✓ Inside geography and time.
  - Calculation of achieved results:

    Direct: EnDev-BDs x SusF x AddF x 100% +

    Indirect: Non-EnDev-BDs x new SusF? x new AddF? x EnDev-BDs/(All BDs)

- Handover of stove-program:
  - EnDev has promoted stoves (ICS) in 10 years
  - New donor comes in and EnDev hands over the stove component of their program

- Situation
  - New donor gets a flying start
  - EnDev performance numbers take a dive for a few years

- Indirect result
  - ✓ Same market partner (stove producers and resellers)
  - ✓ Justifying narrative
  - ÷ Outside time boundary;
  - ✓ Inside technology and geography
  - Calculation of achieved results:

    Indirect: New sales x new SF x new AF x

    [Y1: 50%; Y2: 30%; Y3: 10%; Y4+: 0%]

Questions to the audience

1. Do you agree to this way of altering concrete results based on theory/forecasts ?

2. Does quantification of additionality, sustainability, and attribution create the right incentives for energy access programmes?

3. Are there other cooperations or programmes that actively reduce their observed results using 'factors' similar to EnDev's system?

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