Sixth CDM Roundtable

Session V: Standardized baselines – DRAFT Guideline for Determination of Baseline and Additionality Thresholds for Standardized Baselines using the Performance-Penetration Approach

Bonn, Germany, 12 October 2012

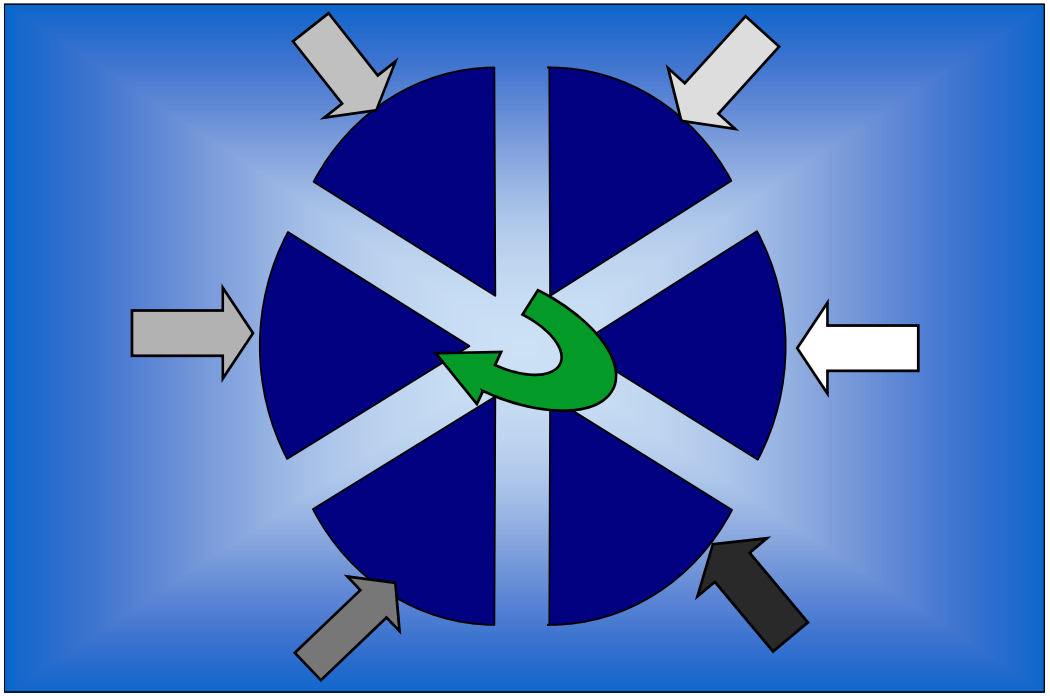
Background

- Mandate: At its sixty-fifth meeting, the Board agreed to the “work programme on standardized baselines ”, requesting the secretariat, to develop the options for the setting and approval of values of the relevant thresholds for baseline and additionality (Xa, Xb, Ya, and Yb) used in the SB guidelines, in consultation with relevant stakeholders and experts.

- Consideration to date: At its sixty-fifth meeting, the Board approved the thresholds on an interim basis i.e., 80% for priority sectors and 90% for the remaining sectors. EB69 considered the draft guidelines and requested secretariat to take stakeholders’views in account. The call for public inputs is ongoing (26 Sept-16 Oct).

- Objective: To provide objective method for setting the baseline and additionality thresholds in order to facilitate the development of standardized baseline.

Overview of approach of SB guidelines



Technologies in Positive list are less attractive

Sub-Coal | Diesel Engine | OCGT | CCGT | RB | Wind

0% | 25% | 50% | 75% | 100%

Baseline threshold

Addl. Threshold

Key issues

❖ The key challenge is the identification of common practice segment (CP segment) that is used to determine the baseline technology, based on the principle of common practice.

✓ Definition of the CP segment:

a) Terminology used herein
   - Performance: the relative EF of a technology against the maximum EF of all technologies in the sector
   - Penetration: the share of output against the overall output in the sector

b) Quantitative criteria proposed (Performance-Penetration Approach)
   - performance range of 20% or less;
   - penetration range of 50% or more.

➢ The Guidelines are only applicable to measure of “technology switch”;

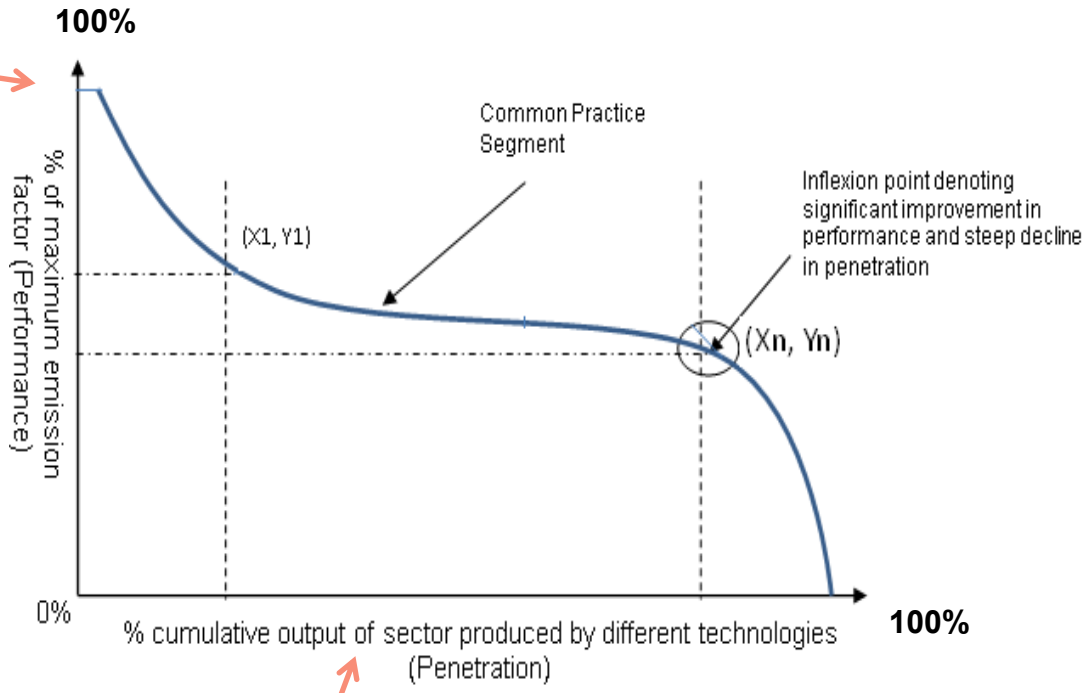
➢ The approach presented in the Guidelines is not mandatory.

Overview of document - Performance-Penetration Approach

Y-axis: Performance

•Technologies defined by their relative emission factors (e.g., ton-CO2/ton-Output)

•Ranked in descending order, i.e., cleaner technology is closer to the origin.



X-axis: Penetration

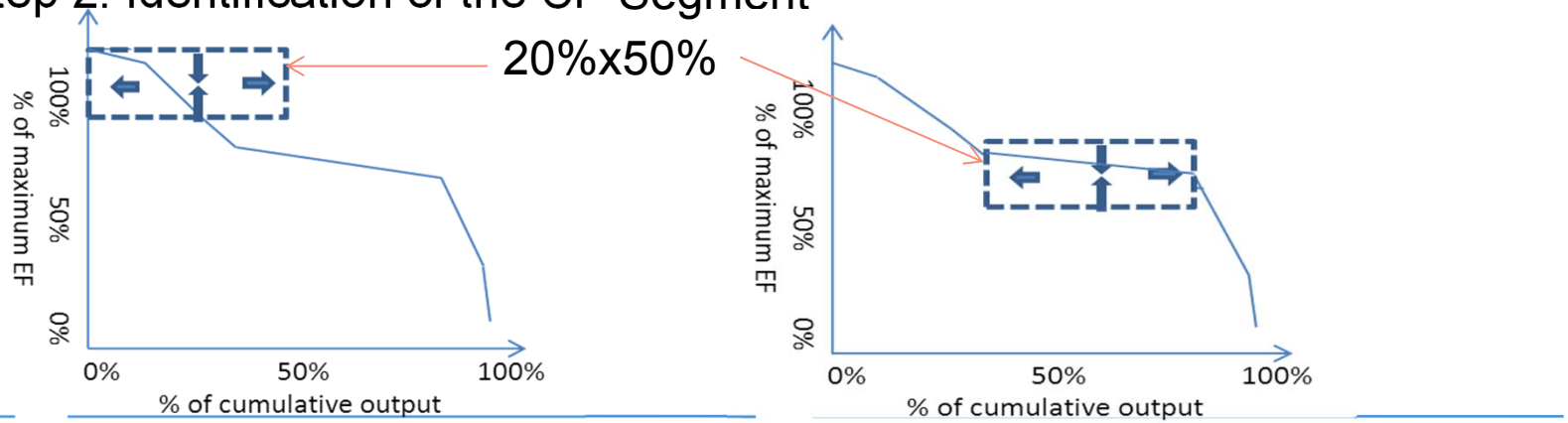
- Presenting relative contributions to the production of the output by different technologies
- Shown in a cumulative format

Overview of document - Performance-Penetration Approach

The aim is to capture the "**flat**" segment in the curve to depict baseline, i.e., the CP segment, which depicts that commonly available technologies will be implemented in business-as-usual scenario.

- Step 1: plot the curve
  - Design performance data and their respective production data
  - Technologies with the same EF are plotted as one single point
  - Remove highly inefficient technologies (>10% in Y-axis) with low penetration (<5% in X-axis)

- Step 2: Identification of the CP Segment



Overview of document - Performance-Penetration Approach

- Step 3: Setting the thresholds
  - ✓ Scenario 1: CP segment exists after Step 2

  Set the threshold on the X-Axis that corresponds to the weighted average of EFs of those technologies contributing to the last 20% of the output in the common practice segment.

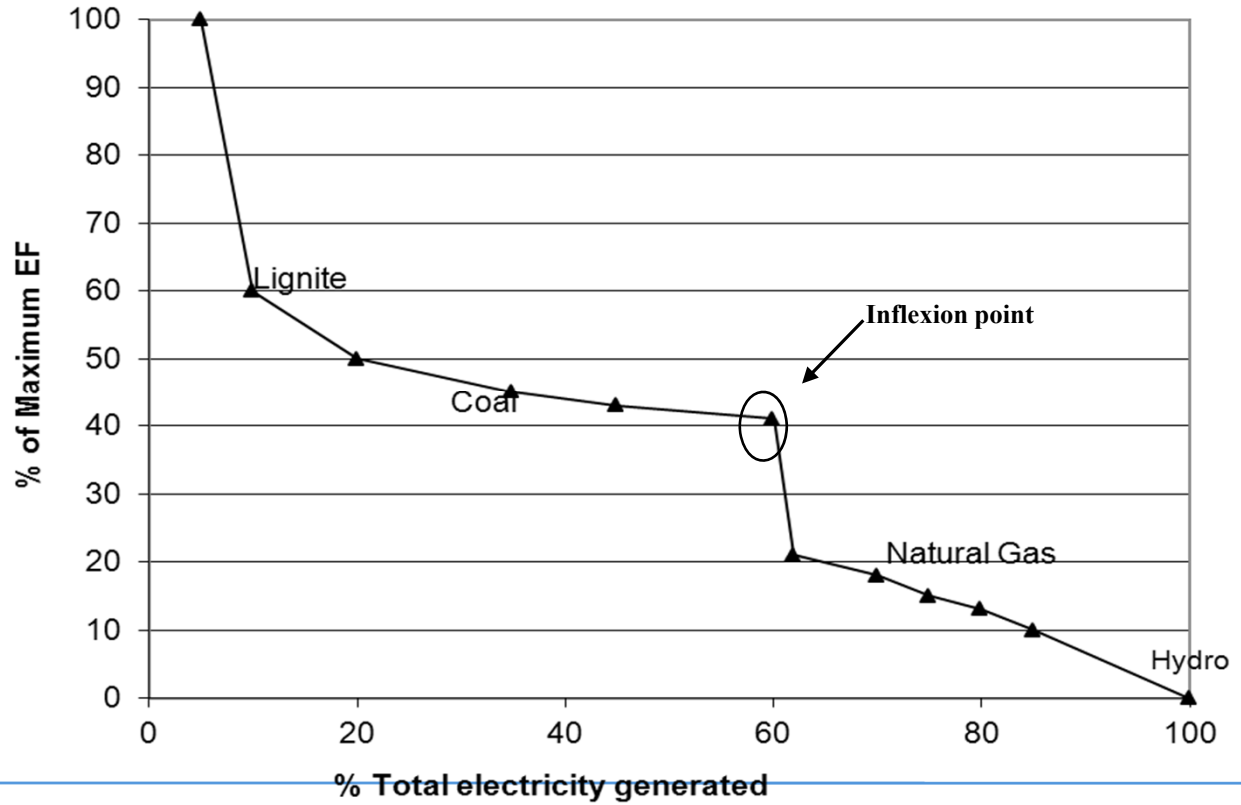
  - ✓ Scenario 2: CP segment doesn't exist

  Use interim values set by the Board. i.e., 80% for priority sectors and 90% for the remaining sectors

Overview of document - Performance-Penetration Approach

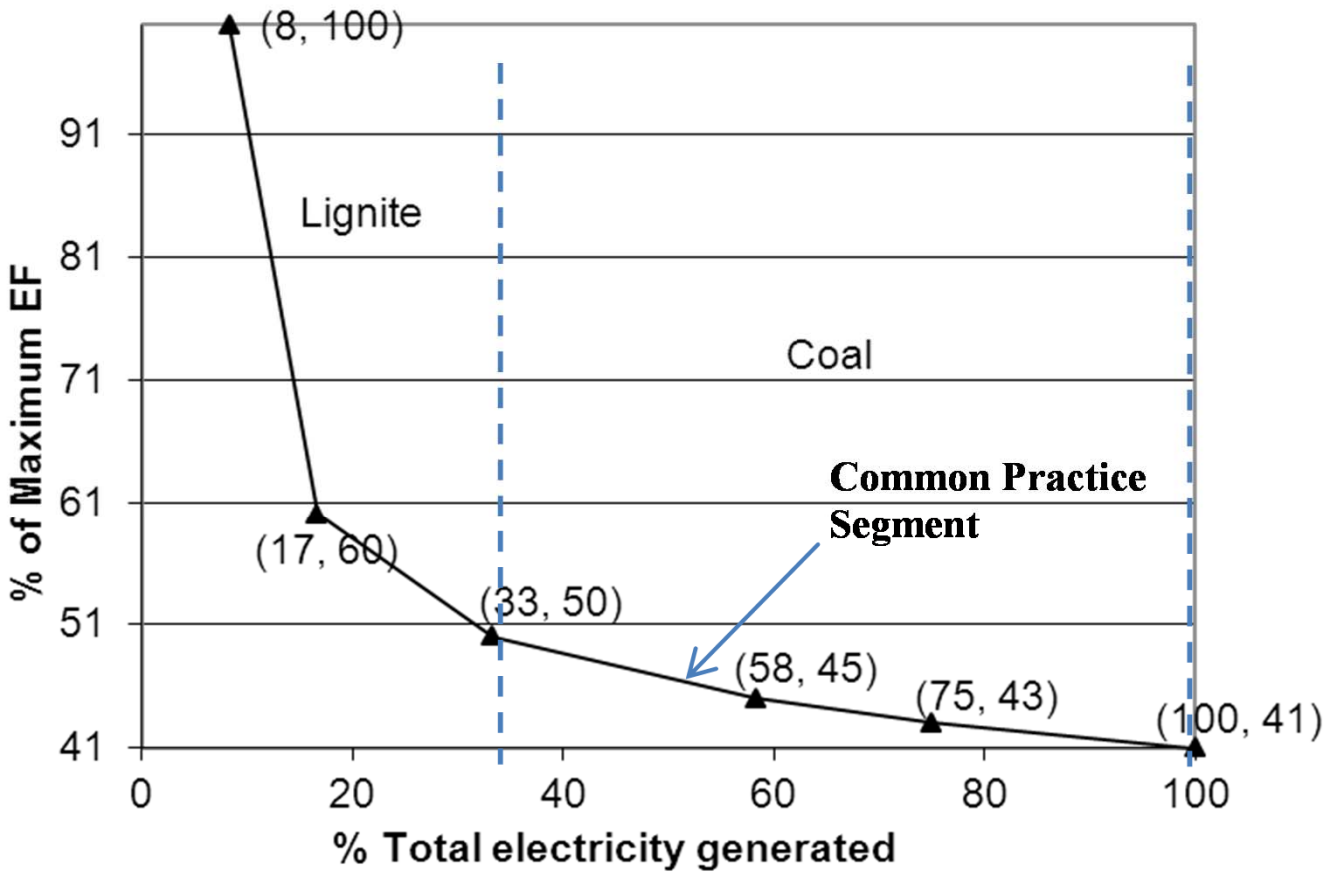
- Where applicable, Disaggregation will need to be carried out to avoid creating disincentives

Example:



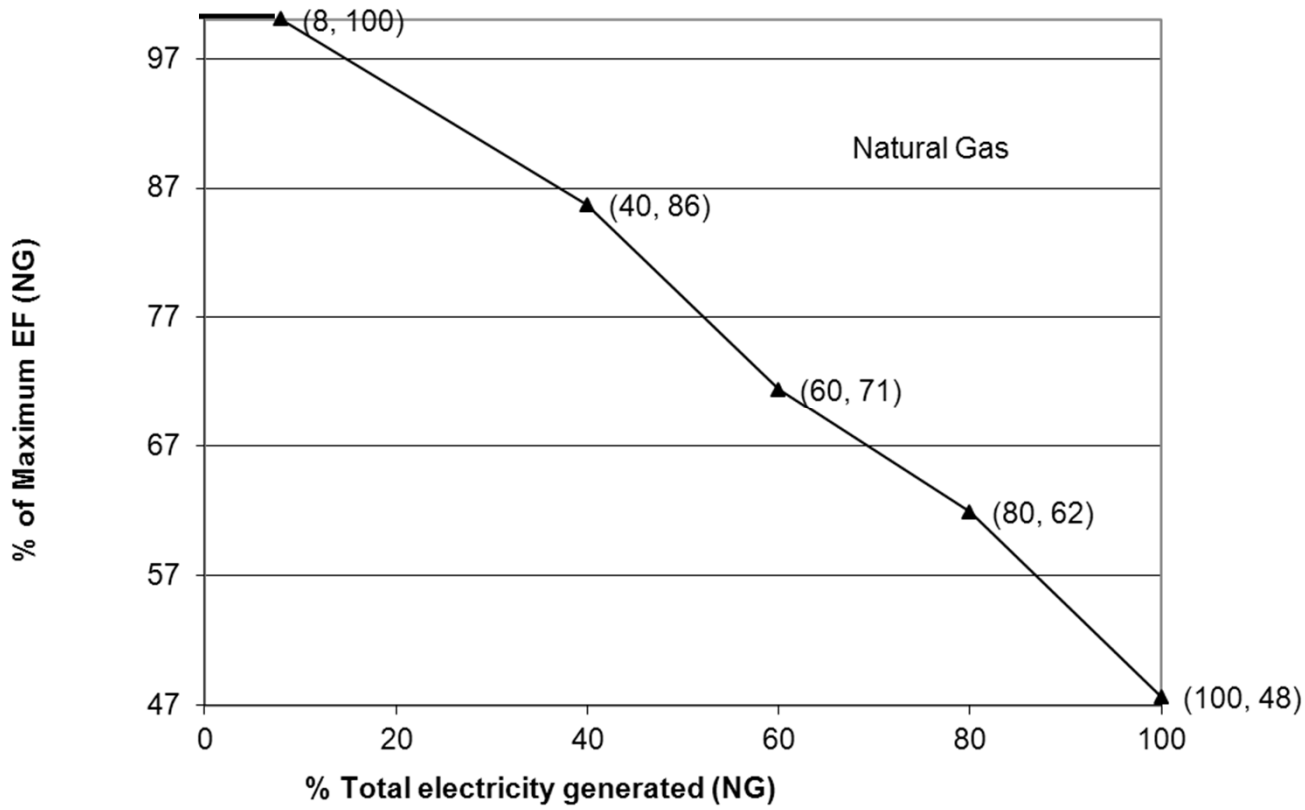
Overview of document - Performance-Penetration Approach

Disaggregated curve of power sector based on fuel type (sub-sector A)



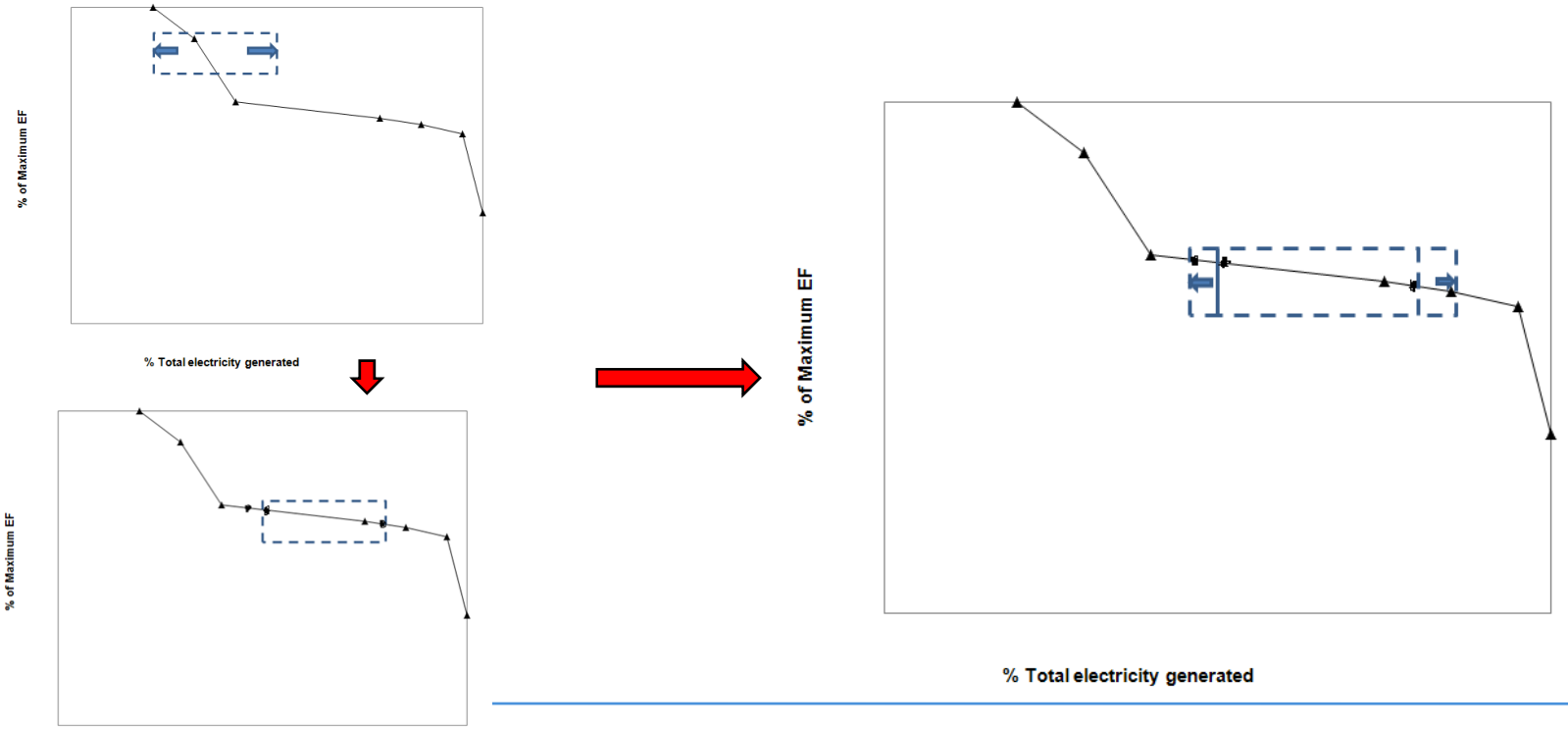
Overview of document - Performance-Penetration Approach

Disaggregated curve of power sector based on fuel type (sub-sector B)



Further alternative approaches under consideration for defining the CP segment (3)

- Step 1: Move the box (20% x 50%) from left to right, or right to left;
- Step 2: Wherever one fitted segment is found, stretch both right side and left side of the box in order to cover as much length of curve as possible while still meeting the 20% in width.
- The segment covering the max. length is the CP segment.



THANK YOU!