Lessons learned from benchmarking

Experience from the Netherlands

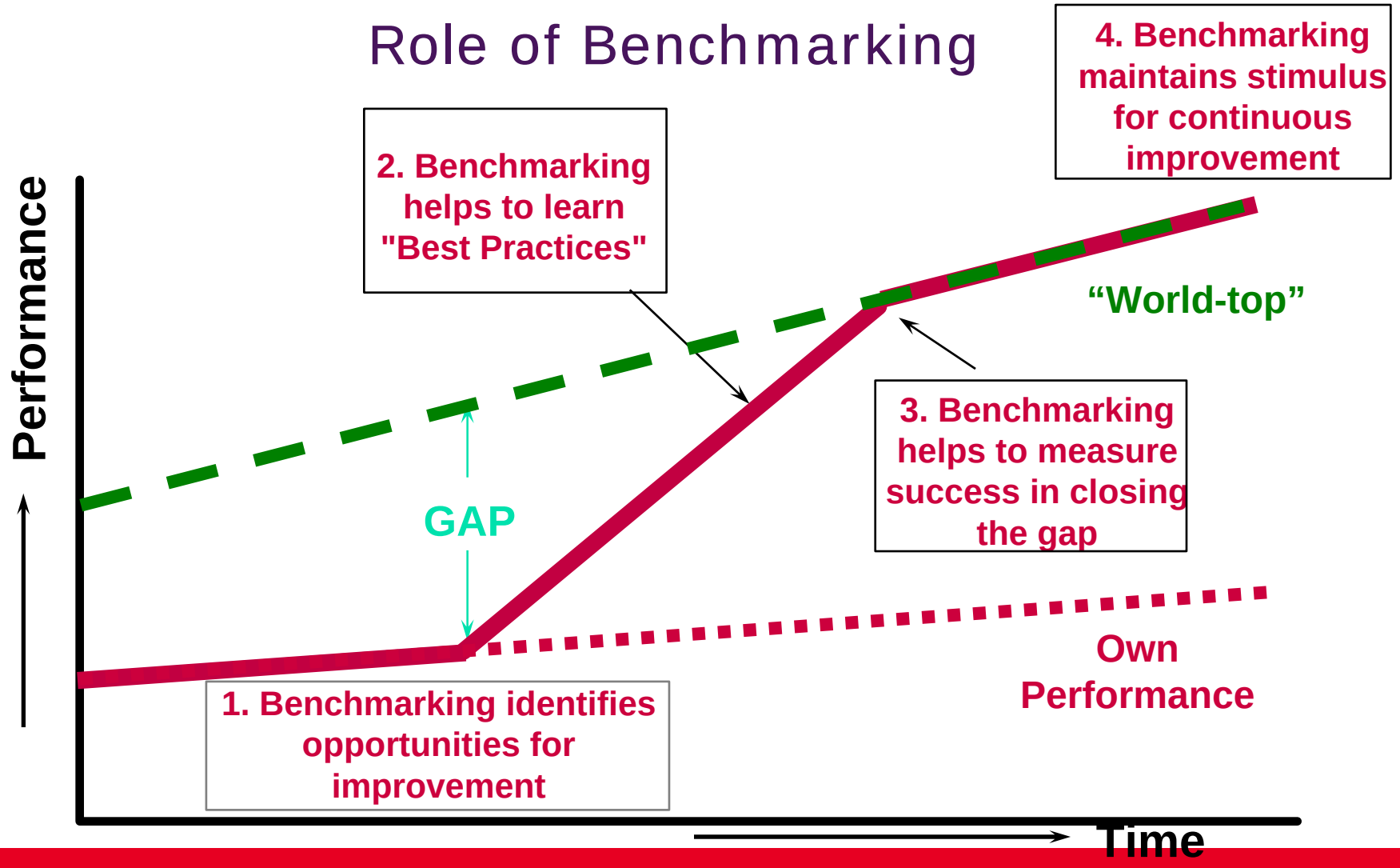
Benchmarking is Not the same as Benchmarks

- *Benchmarks* are performance measures: How many? How quickly? How high? How low?

- *Benchmarking* is action—discovering the specific practices responsible for high performance, understanding how these practices work, and adapting and applying them to your organization or situation.

Benchmarks are facts; benchmarking enables real improvement.

Role of Benchmarking



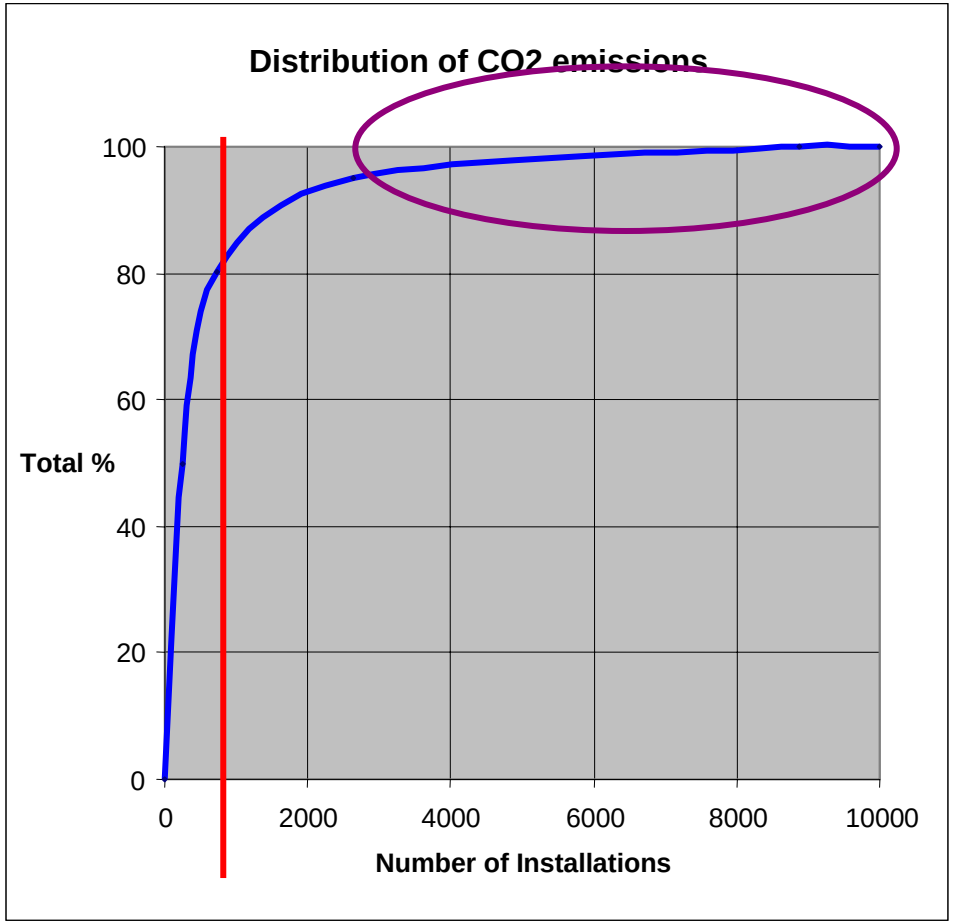
Two experiences

1 - Convenant Benchmarking Energy-efficiency

2 - N2O Benchmark application in EU-ETS

- Presentation will focus on lessons learned from both systems for
  a) BM in EU-ETS and
  b) BM beyond the EU-ETS

Distribution of CO_2 coverage in 2005 for participants EU-ETS



80 % **of the total emission volume within ETS system originated from** **740 Installations**

- **These Installations represent a limited number of major products/processes**
  - **Power plants**
  - **Steel plants**
  - **Refineries**
  - **Petrochemical installations**
  - **Cement plants**

7370 Installations **in EU were responsible for only 5 % of total ETS emission**

1/ lessons learned from BM Convenant

a) For BM in ETS:

1. Focus: Apply the Pareto concept!
   - Develop EU wide BM rules for allocation to the “major few”
   - Leave allocation principles for the “many” to the fallback option unless a BM is available
2. Developing a BM takes time, but it can always be done!
3. "The perfect BM " requires the following:
   - Building on existing Benchmarking scheme;
   - Independent Consultant (preferably own initiative);
   - All input data directly from participants;
   - Regular Participants conference;
   - Sufficient number of participants (> 50 % sector volume);
   - Adequate geographical coverage;
   - Regular updates, once every two to three years;
   - Benchmarking results show underlying reasons

b) For BM beyond ETS:

Besides an allocation tool, BM can be an excellent tool for stimulating continuous improvement and establishing a performance standard rate between installations!

2/ Lessons learned from N2O benchmarks

a) For BM in ETS:

1. If you are the first to develop benchmarks, be prepared for a bumpy ride!
2. The credibility of ETS needs carefully set benchmarks
3. Declining benchmarks could be a way to reward early movers: e.g. BM is 1.7 (’08) -1.5 (’10) – 1.3 (’12) kgN2O/ton 100%HNO3.
4. BREF documents may not be the best source for setting a benchmark. If there is no good source, a separate study can be best thing to do

Suggested points for discussion

- do we follow Pareto or do we focus too much on the details?
- how can we ensure BMs are set carefully?
- should we be able to “improve” BM’s for ETS 2012-2020 over time? (e.g. consider energy beer BM and declining BMs in N2O)

Thank you!

Elske van Efferink
e.m.vanefferink@minez.nl

Jan Janssen
janssej@senternovem.nl

Julia Williams-Jacobse
Julia.Williams-Jacobse@minvrom.nl