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

1. Benchmarking identifies opportunities for improvement

2. Benchmarking helps to learn "Best Practices"

3. Benchmarking helps to measure success in closing the gap

4. Benchmarking maintains stimulus for continuous improvement

"World-top"
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 CO₂ 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