EMAS Regulation (EMAS III)

Article 46(1) of EC No 1221/2009

Development of reference documents and guides

1. The Commission shall, in consultation with Member States and other stakeholders, develop sectoral reference documents that shall include:

a) best environmental management practice

b) environmental performance indicators for specific sectors

c) where appropriate, benchmarks of excellence and rating systems identifying performance levels.
## Sectoral reference documents (SRDs)

- SRDs are **technical** documents
- Focus on quantitative indicators and best practice (what is possible)
- **Benchmarks of excellence** = best achievable performance
- Applicable to all organisations (not just for EMAS ones)
- Collate data from industry and experts

## Process level best practice descriptions

- Description
- Achieved environmental benefit
- Environmental indicators
- Cross-media effects
- Operational data
- Applicability
- Economics
- Driving force for implementation
- Reference organisations
- Reference literature

* > 36 key processes described in SRD
Indicators and benchmarks: energy e.g.

Tourism best env. management practice - Smart Destinations

- HVAC
- Lighting
- Kitchen
- Laundry
- Gym+pool

Energy consumption (MWh/yr)

Average
Best practice

RE generation

- HVAC
- DHW
- Appliances
- Kitchen
- Laundry
- Gym+pool

Indicators and benchmarks: energy e.g.

- HVAC (kWh/m² yr)
- W/m² installed, kWh/m² yr
- Hotel consumption (L/guest-night)
- Pool (kWh/m²)
- Kitchen (kWh/cover)
- Dishwasher (kWh/rack)
- Laundry (kWh/kg; kg laundry/g.n.)
Process level benchmarks: energy e.g.

- the rated energy performance of new buildings conforms with Minergie P or PassiveHouse standards;
- installed lighting capacity <10 W per m² or lighting electricity consumption <25 kWh/m² yr (heated and cooled floor area);
- total process energy consumption for dried and finished laundry products ≤0.90 kWh per kg textile for accommodation laundry and ≤1.45 kWh per kg textile for restaurant laundry...

Enterprise level benchmarks: energy e.g.

Benchmark: 180 kWh/m² yr (top 10%)
Data from one hotel group: correspond well with HES data from across Europe
Economics assessed

![Graph showing annual cost/saving (EUR) for different energy sources and practices.]

- Electricity (lights, appliances): Best practice 0.2 EUR/kWh, Average saving 0.1 EUR/kWh
- Gas: Best practice 0.06 EUR/kWh, Average saving 0.09 EUR/kWh
- HVAC, DHW (onsite fuels): Best practice 0.2 EUR/kWh, Average saving 0.1 EUR/kWh
- HVAC, DHW (electricity): Best practice 0.2 EUR/kWh, Average saving 0.1 EUR/kWh

SRD progress

Second draft can be downloaded from:

Final draft due end of May