

# Carbon Footprint Baseline Method

Standard operating procedure (SOP) | ENV-SOP-007

|                                  |                                                                                                                             |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Document type                    | Standard operating procedure (SOP)                                                                                          |
| Title                            | Carbon Footprint Baseline Method                                                                                            |
| Document ID                      | {{facility.code}}-ENV-SOP-007                                                                                               |
| Version and status               | 1.1   Approved by the ASF Expert Committee                                                                                  |
| Prepared by                      | {{roles.quality_lead.name}}, Quality lead                                                                                   |
| Reviewed by                      | {{roles.clinical_director.name}}, Clinical director      Date: _____                                                        |
| Approver and signature           | {{roles.clinical_director.name}}, Clinical director<br>Signature: _____      Date: _____                                    |
| Effective date                   | {{document.effective_date}}                                                                                                 |
| Next review                      | {{document.review_date}} (12 months, or sooner after any incident or change)                                                |
| Replaces                         | None (new document)                                                                                                         |
| Standards and criteria supported | Standard 2C, criterion 2C.6                                                                                                 |
| Evidence basis                   | E-009                                                                                                                       |
| Status of this document          | Recommended best-practice model. A hospital may adopt, adapt or replace it with an equivalent that meets the same criteria. |

## At a glance: what to do

1. Calculate a baseline carbon footprint from energy and travel data, even a minimal one.
2. Write the method, the data sources and the emission factors used.
3. Date the baseline and repeat it when data allow.
4. Plan to extend the scope as resources allow.

Stop and get help straight away if: the baseline has no method, no date and no data source.

## 1. Purpose

To establish a dated carbon footprint baseline, using a documented method, so change can be measured over time [EC].

## 2. Scope

|                   |                                                                    |
|-------------------|--------------------------------------------------------------------|
| Applies to        | Facilities manager, energy lead, the person preparing the baseline |
| Locations         | The whole facility                                                 |
| When              | Baseline within 12 months; repeat when data allow                  |
| Does not apply to | Full life-cycle assessment of products                             |

## 3. Definitions and abbreviations

| Term                    | Meaning in this SOP                                                                     |
|-------------------------|-----------------------------------------------------------------------------------------|
| <b>Carbon footprint</b> | Greenhouse gas emissions caused by the facility, expressed as carbon dioxide equivalent |
| <b>Emission factor</b>  | A standard value converting energy or travel into emissions                             |
| <b>Scope</b>            | Categories of emission, such as direct fuel use, purchased electricity and travel       |

## 4. Background and rationale

A basic carbon footprint is enough to start measuring change. Criterion 2C.6 asks for a baseline with method and sources, not a perfect calculation.

## 5. Responsibilities

| Role               | Duties in this SOP                     | Competence needed      |
|--------------------|----------------------------------------|------------------------|
| Energy lead        | Prepares the calculation               | Energy management (EC) |
| Facilities manager | Checks the data and signs the baseline | Facilities management  |
| Chief executive    | Accepts the baseline                   | Executive              |

## 6. Equipment, materials and resources

| Item                                 | Specification or standard                            | Check before use |
|--------------------------------------|------------------------------------------------------|------------------|
| Energy records (ENV-FRM-008)         | Latest 12 months                                     | Available        |
| Travel records (staff and transport) | Latest 12 months where available                     | Available        |
| Emission factor table                | From an agreed national or international source (EC) | Dated            |

## 7. Safety and infection prevention

- None specific.

## 8. Before you start

- Agree the scope and the emission factor source.

## 9. Procedure

Follow the steps in order. Where a step says "If", take the action for the case that applies. Do not skip a step. If a step cannot be done, use section 11 and section 12.

| Step | Action                           | How to do it                                                                                                                                                                                                    | Key point                                              |
|------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| 1    | Define the scope and the source. | <ul style="list-style-type: none"> <li>Define which emission sources are included: fuel, purchased electricity, and travel where data exist.</li> <li>Record the emission factor source and version.</li> </ul> | A stated scope lets the next baseline be compared.     |
| 2    | Collect the data.                | <ul style="list-style-type: none"> <li>Collect 12 months of energy and travel data.</li> <li>Record the data source for each item.</li> </ul>                                                                   | Data sources are what make the figure checkable.       |
| 3    | Calculate and date.              | <ul style="list-style-type: none"> <li>Calculate the emissions by source.</li> <li>Record the date, the method, the total and the scope on ENV-FRM-009.</li> </ul>                                              | A figure without a date and method cannot be repeated. |
| 4    | Repeat and extend.               | <ul style="list-style-type: none"> <li>Repeat the calculation each year or when data allow.</li> <li>Each repeat extends the scope if resources allow, and records the change in scope.</li> </ul>              | Repeat calculations show the trend.                    |

### Decision points

- If data are missing for a source, record it as excluded and say why.

## 10. Special situations

| Situation      | What to do                                                               |
|----------------|--------------------------------------------------------------------------|
| No travel data | Record the gap, estimate by a stated method, and mark it as an estimate. |

## 11. Problems and escalation

- Any major gap in data is reported to the facilities manager.

## 12. Monitoring and compliance

| What is checked                         | Target | How often | Who                | If the target is missed |
|-----------------------------------------|--------|-----------|--------------------|-------------------------|
| Baseline dated, with method and sources | Yes    | Yearly    | Facilities manager | Correct within 30 days  |
| Repeat calculated when data allow       | Yes    | Yearly    | Energy lead        | Escalate                |

## 13. Records

| Record                                       | Where it is kept | Kept for                                   |
|----------------------------------------------|------------------|--------------------------------------------|
| ENV-FRM-009 Carbon Footprint Baseline Record | Governance file  | {{facility.records_retention_years}} years |

## 14. Training and competence

- Energy lead is trained in the method (EC).

## 15. Related documents

| ID          | Title                               | Relationship   |
|-------------|-------------------------------------|----------------|
| ENV-FRM-009 | Carbon Footprint Baseline Record    | Used in step 3 |
| ENV-SOP-006 | Energy Use Monitoring and Reduction | Data source    |

## 16. Evidence

| ID    | Source and status                                                                                         |
|-------|-----------------------------------------------------------------------------------------------------------|
| E-006 | ASF Policy Framework v1.2. Adapted.                                                                       |
| E-009 | ASF Expert Committee consensus. Emission factor sources set by the ASF Expert Committee by the committee. |

EC = ASF Expert Committee consensus. Items marked EC are reviewed by the Committee each year.

## 17. Change history

| Version | Date                        | What changed                                                                             | Approver and signature               |
|---------|-----------------------------|------------------------------------------------------------------------------------------|--------------------------------------|
| 1.0     | {{document.effective_date}} | First version                                                                            | Approved by the ASF Expert Committee |
| 1.1     | {{document.effective_date}} | Internal quality review: corrected cross-references, status wording and document control | Approved by the ASF Expert Committee |