

Towards a common standard for LCA of pharmaceutical drugs:

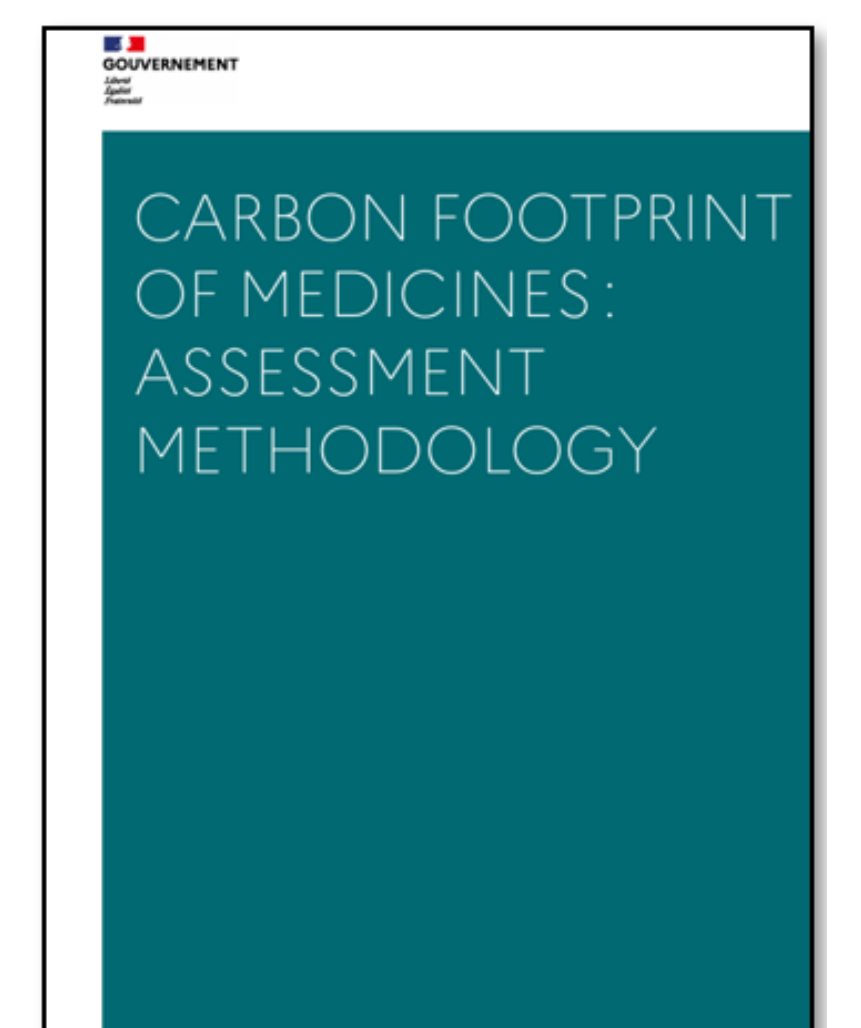
Comparison of PAS 2090 and French medicine carbon score

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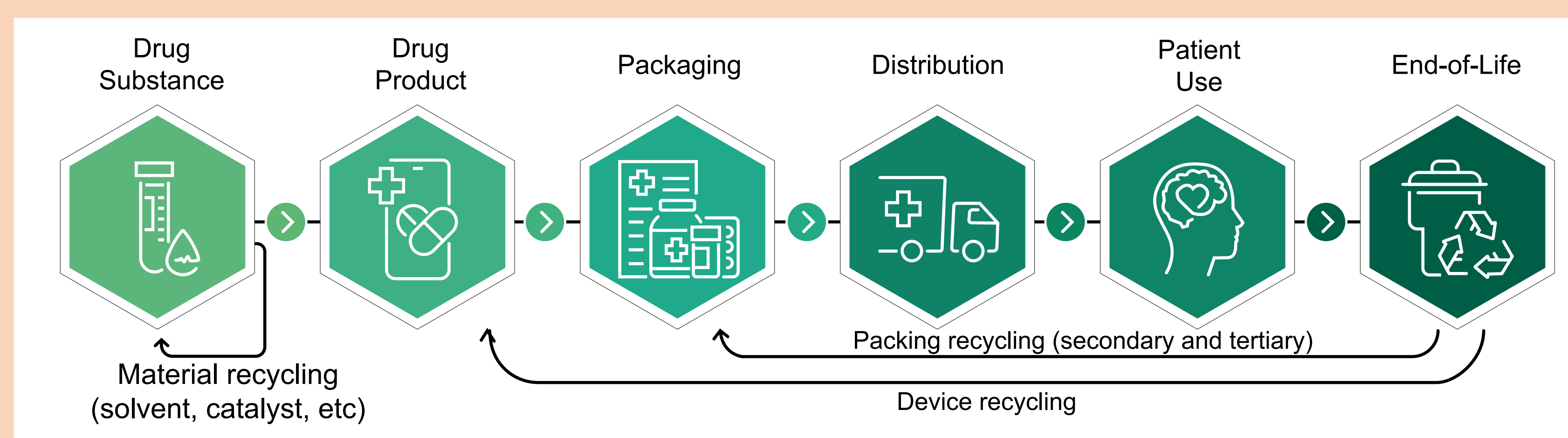
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Background

- Hospitals and healthcare providers face increasing pressure from **emerging regulations and net-zero targets**, driving requests for **product carbon footprints (PCFs) from pharmaceutical supplier**.
- The **United Kingdom and France** are among the first countries to formalize LCA-based approaches for medicines.
- **PAS 2090**, developed by BSI, has recently been published to support standardized disclosure of pharmaceutical LCAs.
- In parallel, France has introduced a dedicated methodological guidance for pharmaceutical LCAs, known as the **Medicines' Carbon Score**.
- These two frameworks are **not fully aligned**, potentially resulting in **non-comparable PCF values across countries** and **increasing the costs and complexity of conducting LCAs for medicines**.



Key stages of a pharmaceutical product life cycle

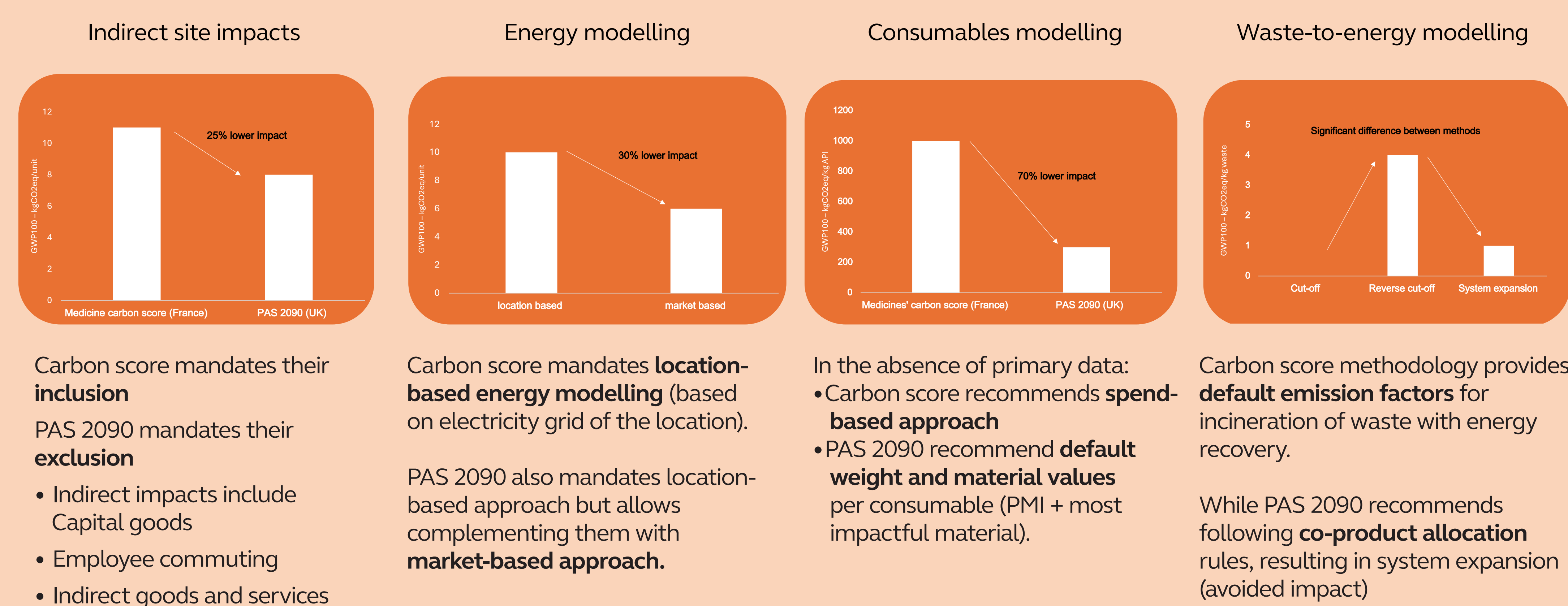


Source: <https://peghub.org/lca>

Objective

- To compare PAS 2090 and the French pharmaceutical PCF methodological guidance
- To identify **key divergences in methodological approaches and data requirements**.
- To assess **how these differences affect the resulting PCF values**

Key methodological divergences and data requirements differences



Other key differences in LCI development

1. Treatment of **cleaning materials**
2. Handling supply **chain complexity**
3. Inclusion of **patient travel impact**
4. Approach to **energy allocation**
5. Use of **default emissions factors**

Key differences in reporting and verification

- PAS2090 requires reporting and critical review in line with ISO 14044.
- Medicine carbon score requires reporting in a specific excel matrix, ad hoc audit process and mandatory third-party review process by a certified party and verification of supplier specific PCFs by an auditor.

Results

- **Challenges harmonization of standards** at the European level;
- Divergent methodologies risk generating **non-comparable results across countries**;
- Divergent reporting obligations **increases costs and complexity**.

Recommendations

- Minimize use of **default values unless necessary**: reduce comparability, eco-design and primary data collection incentives.
- Harmonize LCA methodologies for pharmaceuticals.
- Use of **PAS 2090 as a reference framework** for country-specific regulations and methodology development.