PACT Methodology Checklists

PACT, April 2025

Powered by WBCSD World Business Council for Sustainable Development

PACT Methodology Checklists

Chapter	How to use this chapter
1 **PACT Methodology alignment checklist**	Use this checklist to ensure any previously calculated Product Carbon Footprints PCFs comply with PACT Methodology Version 3
2 **PACT Methodology track changes from v2 to v3**	Use this checklist to understand how to update your PACT Methodology Version 2 aligned PCF to PACT Methodology Version 3

This checklist is meant to help you assess how aligned your LCA process is to the PACT Methodology
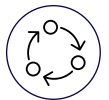
This checklist in brief

What? This section contains a checklist which walks you through the key methodological elements of PACT Methodology

Why? You might be asked by your LCA data users to what extent your LCA process aligns with PACT Methodology requirements – this checklist hopes to facilitate this assessment

For whom? Any company that needs or wants to understand how aligned its LCA processes are to the PACT Methodology – some methodological knowledge will be helpful

How? The checklist includes a series of Yes-or-No questions – checking all boxes means full alignment

How to use this checklist

Preparation

Before going through the checklist, it will be helpful to have a clear understanding of your LCA approach and gather any useful documentation

Assessment

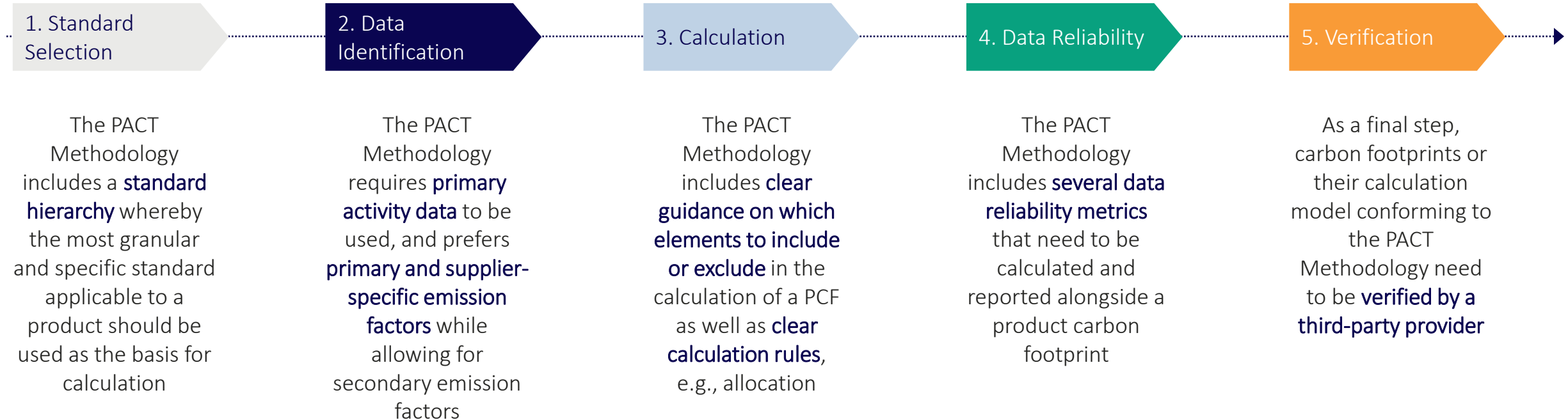Go through each checklist item, marking whether your response aligns with PACT Methodology response

Results

Full alignment to PACT Methodology occurs when each of your responses matches the Methodology response

Follow-ups

Highlight and communicate any significant divergences

This checklist covers the 5 key methodological steps of the PACT Methodology

1. Standard Selection

2. Data Identification

3. Calculation

4. Data Reliability

5. Verification

The PACT Methodology includes a **standard hierarchy** whereby the most granular and specific standard applicable to a product should be used as the basis for calculation

The PACT Methodology requires **primary activity data** to be used, and prefers **primary and supplier-specific emission factors** while allowing for secondary emission factors

The PACT Methodology includes **clear guidance on which elements to include or exclude** in the calculation of a PCF as well as **clear calculation rules**, e.g., allocation

The PACT Methodology includes **several data reliability metrics** that need to be calculated and reported alongside a product carbon footprint

As a final step, carbon footprints or their calculation model conforming to the PACT Methodology need to be **verified by a third-party provider**

The PACT Methodology conformance checklist (1/4)

Step	Checklist item	PACT Response	Reference	Checked?
1. Standard Selection	Are you using the most specific PACT-aligned standard (e.g. PCRs or industry specific standards) available?	If PCRs or PACT-aligned industry standards exist, they should be used	Section 3.2.1	◯
2. Data Identification	Are you collecting data for all **cradle-to-gate** processes?	Cradle-to-gate is the boundary for the PACT Methodology[a]	Section 3.2.3	◯
	Are you using only **primary activity data**?	Only primary activity data is allowed in PACT Methodology	Section 4.1.1	◯
	Are you using **primary and supplier-specific emission factors** whenever possible?	Primary and supplier-specific emission factors are preferred whenever feasible	Section 4.1.1	◯
	Do all secondary data sources meet the PACT Methodology?	PACT Methodology lists minimum quality requirements for secondary data sources	Section 4.1.1	◯

a. Outbound transportation and storage should be calculated and reported separately up to the point where another company takes over responsibility for the product (i.e., owns or pays for outbound logistics).

Powered by WBCSD World Business Council for Sustainable Development

The PACT Methodology conformance checklist (2/4)

Step	Checklist item	PACT Response	Reference	Checked?
3. Calculation	Do you have a recalculation policy?	PACT Methodology requires a maximum validity period of up to 3 years, provided that no major changes[a] to the production process take place within the validity period	Section 3.2.3	◯
	Is the unit of analysis a physical unit?	Units of analysis need to be physical units (e.g., liter, kg, etc.). Piece is accepted if a mass unit is also exchanged. PCFs related to services have dedicated units (hour and mb.s)	Section 3.2.4	◯
	Are you using the most recent characterization factors (AR6 GWP 100)?	PACT Methodology requires the most recent characterization factors[b]	Section 3.2.2	◯

a. A variance of 10% percent or more compared to the original PCF.
b. When a new IPCC AR report is released, the following reporting year shall be considered a grace period to give companies sufficient time to update their calculations and systems. During that period, companies may calculate and report PCFs that incorporate characterization factors from multiple versions of the IPCC AR report. Companies shall disclose what AR reports (multiple or single) are used in their PCF calculations

The PACT Methodology conformance checklist (3/4)

Step	Checklist item	PACT Response	Reference	Checked?
3. Calculation	Are you excluding a **maximum of 3%** of total cradle-to-gate PCF	Only 3% of total cradle-to-gate PCF may be excluded	Section 3.3.1.2	◯
	Are you **avoiding allocation** whenever possible, and following the PACT decision tree when not?[a]	Allocation should be avoided where possible through process subdivision or system expansion. If not possible, PACT decision tree should be followed	Section 3.3.1.4	◯
	Are you using the **'cut-off approach'** for the allocation of emissions from recycling materials and energy recovery	PACT Methodology recommends the use of the 'cut-off approach' for the allocation of emissions from recycling materials and energy recovery	Section 3.3.2.2	◯
	Are you calculating and reporting **biogenic and land sector related emissions and removals**?	PACT Methodology requires to calculate and report PCF excluding biogenic CO_2 uptake and PCF including biogenic CO_2 uptake[c]	Section 3.3.2.4	◯

a. Allocation from Product Category Rule (PCR) and sector-specific guidance take precedence over PACT requirements as long as all safeguards are met.
b. System expansion via substitution should only be used if there is a dominant, identifiable displaced product and production path for the displaced product based on sector consensus.
c. Biogenic and land sector related emissions and removals shall be calculated if: the biogenic carbon content of the product is higher than 5% or when biogenic and land sector related emissions are above the exemption rules (i.e., 3% of total cradle-to-gate PCF)

PACT

The PACT Methodology conformance checklist (4/4)

| Step	Checklist item	PACT Response	Reference	Checked?
4. Data Reliability	Are you calculating the Primary Data Share (PDS)?	PDS[a] of the PCFs need to be calculated	Section 4.2.2	◯
	Are you calculating Data Quality Ratings (DQRs)?	DQRs[a] of emission factors and direct emissions data shall be calculated from 2027-onwards[b] following the PACT Methodology data quality assessment matrix for the following three indicators (technological-, geographical-, and temporal representativeness)	Section 4.2.3	◯
5. Verification	Are you using a third-party provider to verify your emission inventory?	Only independent third-party providers accepted	Section 5.3	◯
	Are you verifying your PCF calculations according to the roadmap set out in the PACT Methodology?	PCFs to be verified following the verification roadmap detailing assurance requirements over time	Section 5.3	◯

Powered by

WBC World Business Council for Sustainable Development

This checklist is meant to help you track changes from PACT Methodology V2 to V3

V2 Published January 2022
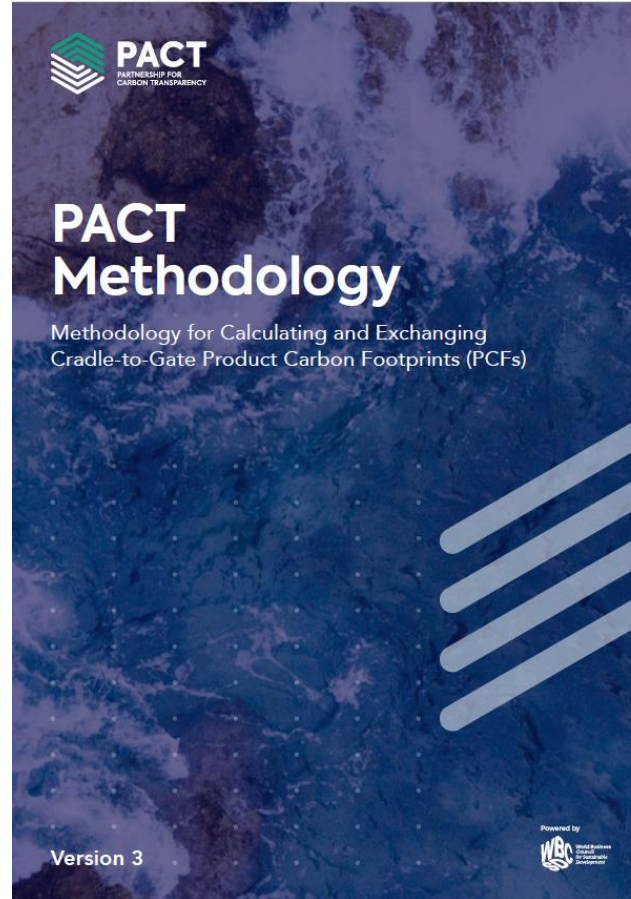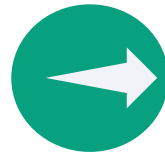
V3 Published April 2025

Updates

1 **Emissions Accounting**

2 **Data Integrity**

3 **Verification**

4 **Data Exchange**

Powered by

12

The PACT Methodology updates tracker – Emission accounting (1/5)

★ New section

Topic	Version 2	Reference	Version 3	Reference	Checked?
★ Calculation of PCFs related to services or Service Carbon Footprints (SCFs)	N/A	N/A	In line with the GHG Protocol definition, product is defined as 'any physical good or service'. To enable calculation and exchange of SCFs, 2 declared units may be used (Time in hour for desk-based services and Usage in Mb.s for IT-related services). Calculating SCFs of desk-based and IT-related service follows same steps as for PCF calculation, outlined in Figure 6 in Section 3.3.	Section 3.2.3 Section 3.3.1	◯
Exemption rules	Possible exclusion of up to 5% of total cradle-to-gate PCF, and inclusion of all processes with >1% of total cradle-to-gate PCF.	Section 3.3.1.2	Possible exclusion of up to 3% of total cradle-to-gate PCF.	Section 3.3.1.2	◯

The PACT Methodology updates tracker – Emission accounting (2/5)

★ New section

Topic	Version 2	Reference	Version 3	Reference	Checked?
Allocation *Identification of waste vs co-products*	An output is classified as a waste if it holds no economic value.	Section 3.3.1.4	For classification of waste vs co-product follow EU waste directive. See Figure 8 for more guidance.	Section 3.3.1.4	◯
Allocation *Allocation between co-products*	Decision tree: Step 1: Avoid allocation Step 2: Prioritize PCRs and sectoral guidance Step 3: Determine ratio of economic value Step 4: Select most suitable allocation	Section 3.3.1.4	Decision tree: Step 1: Avoid allocation Step 2: Determine ratio of economic value Step 3: Select most suitable allocation Prioritization of methods and standards from Section 3.2.1 to be applied first, i.e., PCRs and sectoral guidance take precedence over PACT requirements as long as all safeguards are met. See Figure 8 and associated text for more guidance.	Section 3.3.1.4	◯

★ New section

Topic	Version 2	Reference	Version 3	Reference	Checked?
★ Electricity & contractual instruments	N/A	N/A	Companies shall calculate emissions from electricity use including all GHG emissions from the life cycle of electricity supply system. Companies shall only use certificates from contractual agreements (e.g., RECs, GOs) that meet quality criteria outlined in Box 7. Companies that do not use contractual instruments should use the most accurate emissions factor depending on electricity distribution method. If emission factors only cover gate-to-gate emissions, they shall be complemented by upstream emission factor.	Section 3.3.2.3	◯

The PACT Methodology updates tracker – Emission accounting (4/5)

★ New section

Topic	Version 2	Reference	Version 3	Reference	Checked?
Biogenic and land sector related emissions and removals	Biogenic emissions and removals shall be calculated and included as part of "PCF (incl. biogenic emissions and removals)" metric from 2025 onwards: • Direct land-use change (dLUC) • Land-management-related changes (including land carbon pools and other non-CO_2 emissions related to land management) • Other biogenic GHG emissions not covered in dLUC and land management • Biogenic CO_2 withdrawals GHG emissions associated with indirect land-use change (iLUC) (not included in PCF) emissions may be calculated and reported separately.	Section 3.3.2.4	Biogenic and land sector related emissions and removals shall be calculated if biogenic carbon content of product is higher than 5%, or when biogenic and land sector related emissions are above exemption rules Companies shall report two PCFs: • PCF - excl. biogenic CO_2 uptake, and • PCF - incl. biogenic CO_2 uptake The following categories shall be included in PCF: • Land-use change emissions (LUC) • Land management CO_2 emissions (required from 2027 onwards) • Biogenic Non-CO_2 emissions • Fossil – land management (mandatory from 2027 onwards) • Land management CO_2 removals • Biogenic product CO_2 uptake (Only in PCF incl biogenic CO_2 uptake) To support transparency, Biogenic product carbon content and land occupation are reported outside of PCF	Section 3.3.2.4	◯

PACT

The PACT Methodology updates tracker – Emission accounting (5/5)

★ New section

Topic	Version 2	Reference	Version 3	Reference	Checked?
★ Technological CO_2 capture, storage and use	N/A	N/A	Net CO_2 stored via Carbon Capture and Storage (CCS) should be accounted for, if defined specific requirements described in Section 3.3.2.5 are met. The "cut-off approach" should be used for the allocation of emissions from Carbon Capture and Utilization (CCU)-derived product.	Section 3.3.2.5	◯

The PACT Methodology updates tracker – Data integrity (1/1)

★ New section

Topic	Version 2	Reference	Version 3	Reference	Checked?
Data reliability *PSD and DQR timeline*	Either PDS or DQR shall be calculated and reported until 2025. From 2025, both metrics shall be calculated and reported.	Section 4.2.1	PDS shall be calculated and reported DQR shall be calculated and reported from 2027 onwards[a].	Section 4.2.1	◯
Data reliability *PSD and DQR formula*	Calculation based on PCF.	Section 4.2.2 Section 4.2.3	Calculation based on absolute PCF (excluding biogenic CO_2 uptake).	Section 4.2.2 Section 4.2.3	◯
Data reliability *Data assessment matrix*	3 Data Quality Indicators (DQIs) (Technology-, Geography-, Temporal / Time representativeness) for emission factors. 2 DQIs (Completeness and Reliability) for activity data, ranking from 1 to 3.	Section 4.2.3	3 DQIs (Technology-, Geography-, Temporal /Time representativeness) for emission factors, ranking from 1 to 5.	Section 4.2.3	◯

The PACT Methodology updates tracker – Verification (1/1)

Topic	Version 2	Reference	Version 3	Reference	Checked?
Verification	Defined assurance and verification roadmap and evidence pack providing companies with guidance on the expected level of assurance at three distinct time horizons, including separate requirements for SMEs. • Short-term (2023-2025): Assurance and verification at corporate level • Medium-term (2025-2030): Assurance and verification at Representative product or PCF system (limited assurance) • Long-term (2030 onwards): Assurance and verification at Representative product or PCF system (reasonable assurance)	Section 5	Defined verification roadmap providing companies with guidance on the expected level of verification at two distinct time horizons, including separate requirements for SMEs. • Short-term (2025-2030): Verification of underlying methodology used by any tools (software, excel, platform etc.) to generate PCFs, called the 'PCF Calculation Model'. • Long-term (2030 onwards): Certification of PCF Program, which builds on short term requirements and includes system governing how company generates and manages PCFs.	Section 5	◯

Besides updates, the PACT Methodology v3 provides additional clarifications, please check below that you understood these properly

Topic	Clarification	Reference	Checked?
Hierarchy of application	A clearer explanation in case of conflicting situation: Product Category Rule (PCR) takes precedence over PACT requirements as long as all safeguards are met. The same precedence applies for sector-specific guidance. Additional clarification was added regarding safeguards and key PACT Methodology requirements that should be met or reported when PCRs or sector-specific guidance used.	Section 3.1.2	○
Scope and boundary	Outbound logistics[a] emissions are not part of PCF but are calculated and reported up to the point another company (e.g., customer) takes over (i.e., owns or pays for the outbound logistics).	Section 3.2	○
Data sources and hierarchy	Clearer definitions of primary and secondary data (Table 9). A clearer description of illustrative best-, base-, and worst cases (Table 10).	Section 4.1	○

PACT

a. Transportation and storage from the production gate to the customer gate.

Powered by WBC World Business Council for Sustainable Development

Thank you!