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Date

14/02/2024

Project ID

101023720-001 TVO LCA verification

Recipient

Merja Levy, TVO

Sanna Niemensivu, group controller, TVO



Verification report - third-party verification

Verification concerns the LCA calculation and background reports.

Product/Service/LCA tool name	Life cycle assessment of nuclear energy
Company	Teollisuuden Voima TVO Oyj
Applicable standards	ISO 14067:2018, ISO 14040:2006 and 14044:2006
Product group rules (PCR)	Yes, EPD International PCR 2007:08 Electricity, steam, and hot/cold water generation and distribution (version 4.2)
Period of validity	calculation concerning the year 2022, approved on 14.2.2024
LCA calculator author	Heli Kumpulainen, Kaisa Kuusela, Emma Salminen / Etteplan
Verifier	Laura Sariola and Riikka Anttonen /AFRY Finland Oy

Review Statement

- I have thoroughly reviewed the LCA and its related background information and can confirm that no relevant deviations were found concerning the procedural and methodological requirements of ISO 14067, ISO 14040:2006, 14044:2006, and appropriate PCR.
- After performing the review within the scope of my appointment and making suggested corrections, no significant issues were found in the final LCA report. There were also no major data errors or deviations from relevant standards detected in terms of the underlying data collected and used in the LCA calculations, the way the LCA-based calculations were carried out, or the presentation of environmental performance.
- I have verified the information for credibility, plausibility, and consistency within the limits of my appointment. However, it shall be noted that the study owner is ultimately responsible for the factual integrity and compliance with relevant legislation.
- I have sufficient knowledge and experience in the product/industries/service related to this work, relevant standards, the overall scope of the review following Annex B of ISO 14071:2014 (external reviewer), and the geographical area covered by the LCA to carry out this audit.
- I confirm that I have been independent in my role as a verifier.
- There shall be noted that only the reviewed material may be referenced as reviewed by AFRY Finland Oy, and not any subsequent use of the results.

Name and organization of the third-party reviewer:	Location:
Laura Sariola / AFRY Finland Oy	Espoo
Signature:	Date:
	14.2.2024
Riikka Anttonen / AFRY Finland Oy	Espoo
	26.2.2024

Teollisuuden voima TVO Oy – Life cycle assessment of nuclear energy Version 1.1 14th February 2024

Valid from 14.2.2024 concerning calculations year 2022

As a general rule, the requirements of ISO 14067:2018, 14040:2006, and 14044:2006 have been followed.

The independent verifier is

Internal External

The third-party verification has been carried out by:



Laura Sariola / AFRY Finland Oy / 14.2.2024 Espoo Riikka Anttonen / AFRY Finland Oy / 26.2.2024 Espoo

The work has been carried out with the usual care and professionalism. The best possible assessment has been carried out by qualified and experienced staff. AFRY Finland Oy's liability for the content of the report follows the General Conditions of Contract for Consultancy Services, CSE 2013, and is limited to the consultancy fee under the engagement agreement. AFRY Finland Oy shall not be liable for any direct or indirect financial consequences to a third party arising from the content of this work.

Espoo 14.2.2024 AFRY Finland Oy



Esa Salminen



Laura Sariola