

ICCEE



Improving Cold Chain Energy Efficiency
in food and beverage sector

Grant Agreement N° 847040



D5.5 ICCEE guide on supply chains in the food and beverage sector

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Project information

Project Title	Improving Cold Chain Energy Efficiency
Project Acronym	ICCEE
Project Number	847040
Project dates	September 2019 – August 2022
Abstract	<p>The ICCEE (Improving Cold Chain Energy Efficiency) project will facilitate Small and Medium Enterprises (SMEs) in the cold chains of the food and beverage sector to undertake energy efficiency measures (EEMs) after carrying out supply chain energy audits. The focus on the cold chains of the sector is due to the significant energy requirements (refrigerated transport, processing and storage) with large potentials for savings. The implementation of the holistic approach, shifting from the single company perspective to the chain assessment, lead to increased opportunities for EEMs. To enable the update of EEMs, ICCEE will a) implement and apply an analytical energy efficiency tool to support and facilitate decision-making at different company organisational levels and b) launch a capacity building program towards staff and relevant stakeholders and a community dedicated to support a change in energy culture of the sector. The feasibility of EEMs will be evaluated by considering economic, environmental and social impacts encompassing their entire life cycle and the entire supply chain. Non-energy benefits and behavioural aspects will also be addressed and recommendations on financing schemes for SMEs will be assessed. The first part of the trainings will reach 300 companies through 20 national workshops thanks to the collaboration of associations in the consortium. 32 companies will be trained for the use of the tool in 4 EU workshops. At a final step, ICCEE will launch e-learning courses, which will be available also beyond the project's lifetime reaching at least additional 64 companies. ICCEE will introduce primary energy savings (118 GWh/year), increase invested capital in sustainable energy (64 million €), and reduce GHG emissions (40,376 tonCO₂/year). Capacity building activities allow to increase stakeholders' knowledge and enhance their energy culture (2000 people). Outcomes from ICCEE will also support policymakers in defining tailored policies for the sector.</p>

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About

The project Improving Cold Chain Energy Efficiency (ICCEE) will accelerate turning energy efficiency opportunities of small and medium sized enterprises (SMEs) of the sector into actual investments and create a clear understanding of the opportunities offered by improving energy efficiency for companies' staff.

The specific objectives of ICCEE are:

- 1) Implement and apply an analytical energy efficiency tool to support and facilitate the decision-making processes of the companies in the supply chains in assessing their current energy performance of the supply chain,
- 2) Identify the energy saving potential of companies and support investments in viable energy efficiency improvement measures,
- 3) Create a capacity building programme and a community dedicated to support the change in the energy culture of organizations improving their energy performance through direct training and the development of an e-module.

ICCEE will make it easier for SMEs in the cold chains of the food and beverage sector to undertake energy efficiency measures (EEMs) after carrying out supply chain energy audits.

Focus on the cold chains was decided due to the significant energy requirements (refrigerated transport, processing and storage) of the sector, with large potential for savings. The cold supply chain is among the most energy-intensive systems within the food and beverage sector whilst there is limited understanding of its large energy efficiency potential and the economic advantages that can be obtained from energy saving measures.

The implementation of a holistic approach, shifting from the single company perspective to the chain assessment, leads to increased opportunities for EEMs.

ICCEE is coordinated by the University of Brescia with 12 partners: IEECP, FIRE (Federazione Italiana per l'uso razionale dell'energia), Adelphi Research Gemeinnützige, ATEE (Association Technique Energie Environnement), Fraunhofer, Riga Technical University, ESCAN, SPES GEIE, ECSLA, Chamber of Korinthia, University of Stuttgart, and Romalimenta.



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Project partners



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Introduction

This deliverable is linked to the activities of the Task 5.3 “Exploitation of the tool to additional supply chains in the Food & Beverage sector” lead by FIRE whose purpose is to extend the use of the tool developed under WP3 to other supply chains of the food and beverage sector. The activities of the Task 5.3 aim also to build a partnership with the industrial associations and other relevant organizations that are already active in similar venues to act as a platform for best practice and knowledge sharing from the learnings of the project that can be carried forward even after the end of the project.

To achieve these objectives, potential new stakeholders were identified together with the spes partners to whom the iccee tool was presented together with the IIN platform. The following presentation was a tool developed by FIRE and made available to the partners involved to facilitate, in the initial contact phase with the stakeholders, the presentation and understanding of the tool by showing its main results.

The Deliverable 5.5 was elaborated in Power Point.