



ECO-INNOVERA



EASY

Energy-Aware feeding

SYstems

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Headline

- Project scope
- Partners
- Project objectives
- Work packages
- Project management

Scope

➤ Main goal

- The EASY project aims at promoting energy-aware practices for internal supply operations management, so enhancing the environmental performances of factories.”
- Analyze the raw-material flows across the factory, from the warehouses to the assembly lines, focusing on energy consumption aspects.
- Study of the feeding system of the assembly line of FAGOR Electrodomesticos, Mondragon, Spain.

➤ How

- Modeling of the relationships between energy costs and tactical/operational decisions
- Development of aided-decision tools will be designed and implemented.
 - Simulation-based and optimization-based techniques
 - Favor energy awareness of decision makers.



Partners

Partner 1 is coordinator	First name / last name	Organisation Enterprise	Country or Region	Funding organisation
1	Cyril BRIAND	LAAS-CNRS	France	ANR
2	Victoria RODRIGUEZ	University of Navarra (UNAV)	Spain - Navarra	Ministerio de Ciencia e Innovacion (MICINN)
3	Ioseba BARRENA ELORZA	FAGOR	Spain – Basque country	Basque Region: Sociedad Publica Gestion Ambiental Ihobe S.A (IHOBE)
4	Matias MORIS URENDA	University of Skövde	SWEDEN	Forskningsrådet för miljö, areella näringar och samhällsbyggande (FORMAS)

LAAS-CNRS



Universidad de Navarra



UNIVERSITY OF SKÖVDE

FAGOR

MONDRAGON
UNIBERTSITATEA



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Project objectives

➤ Objective 1

- Analysis of the internal feeding system of Fagor Electrodomesticos, identify the energy using variables and parameters and provide a general model.

➤ Objective 2

- Develop advanced aided-decision tools that favor energy aware behavior, and promote low energy cost decisions.

➤ Objective 3

- Study the validity range of the decision made based on the developed aided-decision tools.

➤ Objective 4

- Analyze the possibility of extending the results to other links of the Fagor's supply chain.



Work packages

- WP 1: Review status of feeding systems
- WP 2: Understand how transport and inventory decisions impact energy consumption in a feeding system
- WP3: Definition of energy aware feeding system models
- WP4: Development of simulations tools
- WP5: Development of optimization tools
- WP6: Analytical and numerical analysis of the feeding systems and its energy awareness impact
- WP7: Experimental testing in an assembly line of the energy-aware feeding system and its environmental impact
- WP8: Extend energy-awareness to Fagor's external suppliers
- WP9: Project coordination and results dissemination



