



ECOINFLOW

**An example on how InnovaWood
can support your EU-project**

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Johannes Welling

WWW.ECOINFLOW.COM



Co-funded by the Intelligent Energy Europe
Programme of the European Union

ECOINFLOW – what does it mean?



ECOINFLOW stands for

Energy **C**ontrol by **I**nformation **F**low

The project was funded within the

„Intelligent Energy – Europe“ Programme

by **eaci**

(Executive Agency for
Competitiveness & Innovation)



ECOINFLOW Project



Partners: Research organisations, sawmills, kiln manufacturer, sawmill associations

Countries: Norway (coordinator), Austria, Belgium, France, Germany, Great Britain, Latvia, Sweden



Project time: 3 years – (2012-2015)

ECOINFLOW Project



Objective: To facilitate implementation of the tailor-made Energy Management System (EnMS) in SAWMILLING industry

Goal: Save energy, save money,
contribute to 2020 EU CO₂ reduction targets

Work packages



- WP 1 Management
- WP 2 Energy management systems
- WP 3 Best industry practice
- WP 4 Energy saving strategies
- WP 5 Communication

ECOINFLOW Project



Organisation:



- 5 core partners doing > 80% of the work
- Each WP was coordinated by a core partner
- All core partners contributed to all WPs
- Main outputs were elaborated jointly, but under the leadership of one of the core partners
- Regular meetings and Skype conferences secured monitoring of work plan and keeping deadlines

Main outputs:



- Ecoinflow handbook,
- On-line benchmark tool,
- Multi-lingual set of Best Practices descriptions,
- Sawmills network in energy saving,
- Change of behaviour and raising the awareness on energy saving.

INTRODUCTION



- **Wasted energy is inefficient use of resources.**
- **Saved energy (energy which is not used at all) is the best of all forms of energy.**
- **There is a great potential to save energy in sawmilling.**
- **EcoInFlow wants to support sawmillers to take action!**



INTRODUCTION



What are key areas of energy use in sawmills?



- Kilns
- Motors (including fans)
- Extraction of saw dust
- Compressed Air

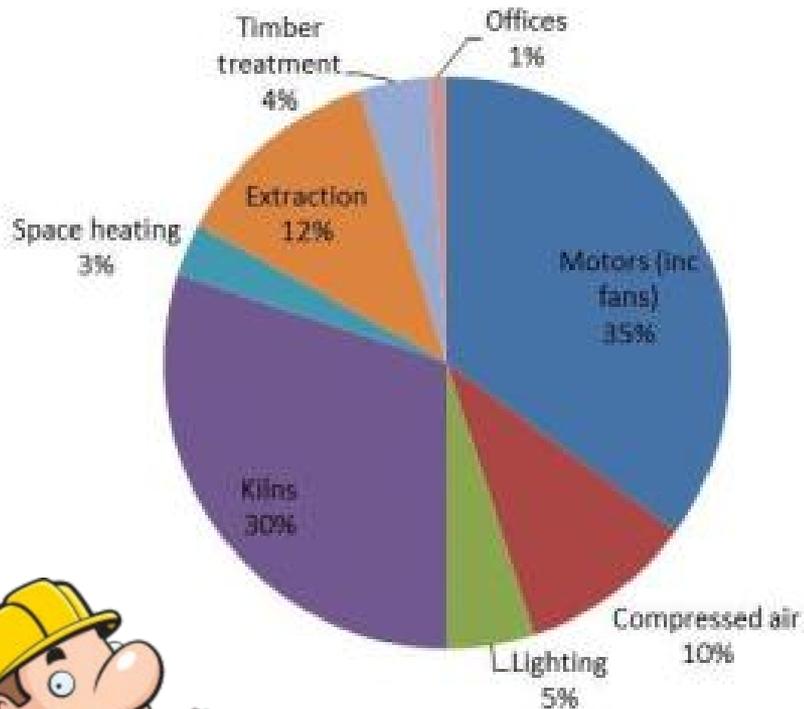
- In the log yard
 - Timber trucks
 - Forklift trucks

- Lighting
- Cooling/heating

INTRODUCTION



Estimated split of energy use in production...



Source BSW

- ❑ Kilns have the biggest energy use on site (up to 90% of heat and 30% of electricity)
- ❑ Green Mill use approx. 50% of electricity
- ❑ Planing and Grading utilises approx. 20% of electricity
- ❑ Offices approx use only 1% of energy but still can significantly increase our utility bill (in some case for €10.000!)

A white thought bubble with a blue outline and a small tail pointing towards the cartoon character below. Inside the bubble, the text "Why do you need EnMS?" is written in a blue, sans-serif font.

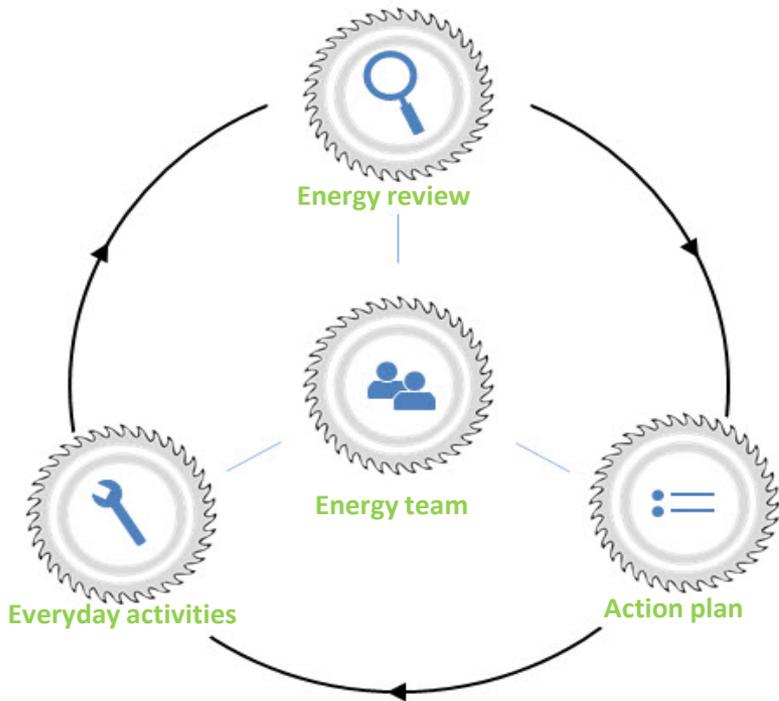
Why do you
need EnMS?



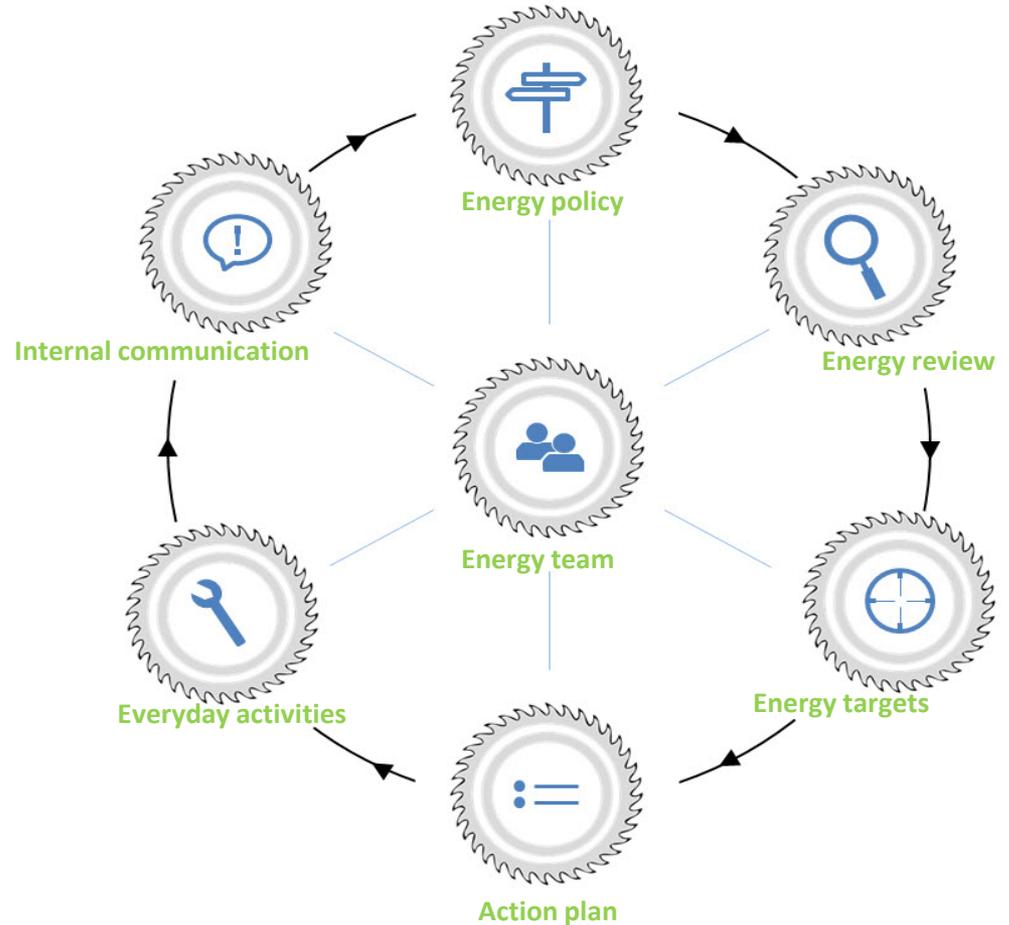
By implementing EnMs you can:

- Save a lot of money
- Reduce environmental impact
- Identify areas for energy saving improvement in production processes and make well-founded decisions
- Speed up the process of energy use reduction
- Share knowledge and experiences, change behavior
- Raise the acceptance and status of energy efficiency work
- Raise the interest for your products with those clients that care on energy saving

OUR APPROACH



Quick-start approach of a SawEnMS implementation



Full version of a SawEnMS implementation

STEP 1: Appoint Energy team



What to do: Let the top management appoint a management representative for your EnMS and install an Energy management team with the required competence, authority and resources.



Expected outcome: Your company has a team of skilled and engaged people that leads the work towards increased energy efficiency.

STEP 2: Energy policy

What is the energy policy?



What to do: Develop an Energy policy and have it approved by the top management.



Expected outcome: Your company has a policy that clearly states your commitment to work on energy efficiency.

A short document, with a statement of your company's commitment to work systematically to increase your energy efficiency.

STEP 3: Energy review



Suggested procedure



- Define and structure the plant you are studying.**

What system boundaries will you use and what sub-parts does your company or plant consist of?

Will you include the entire plant/company?

Will you make separate Energy reviews for different units?

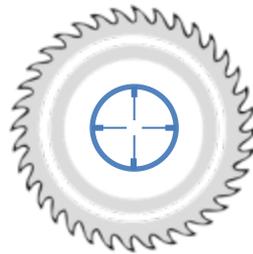
- Collect data on your *total* energy use and corresponding costs.**
- If possible, compare the data you collected to previous years' results.**

STEP 4: Energy targets



What will be your energy targets?

What to do: Set targets for your energy efficiency work that are quantified, measurable and achievable.

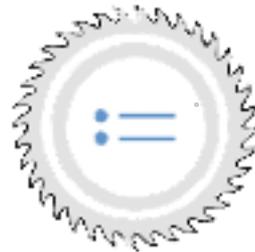


Expected outcome: Clearly expressed goals to aim your efforts at. Without targets you will never know if you have succeed or failed.

STEP 5: Action plan



What to do: List all your ideas for improving your energy efficiency, prioritize them and make a plan for their implementing.



Expected outcome: A road map with planned actions that will make you reach your Energy Targets.

STEP 6: Everyday activities



What will be
my energy
efficiency
routines?



What to do: Include energy efficiency in your daily routines (start-up, breaks, maintenance, procurement, etc.).



Expected outcome: Everyday energy savings without thinking.

STEP 7: Internal communication



Why is the internal communication important?

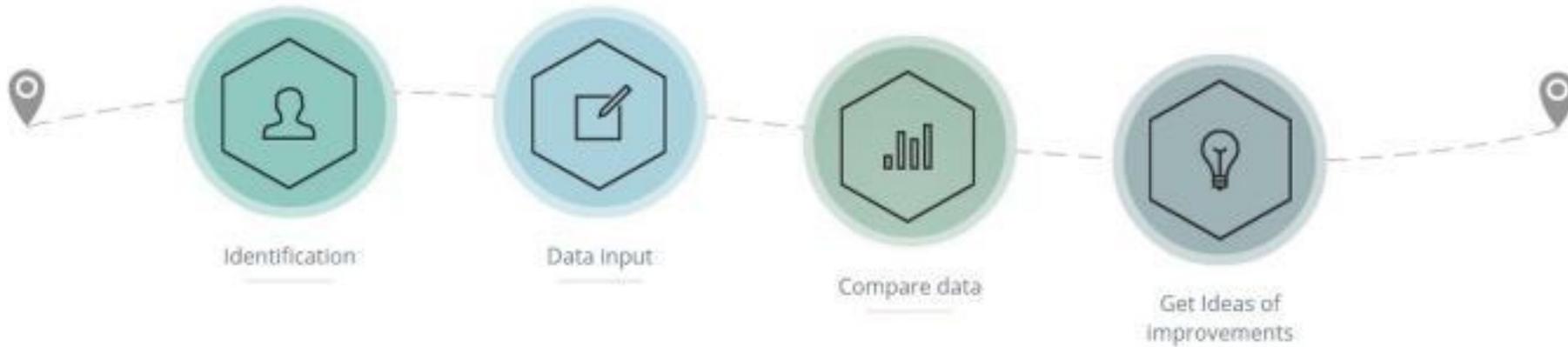


What to do: Involve all employees by communicating the energy policy, the energy targets and the efficiency efforts.



Expected outcome: A staff working together towards the specified energy targets.

Benchmark



Benchmark tool

SawBenchmark: your statistical comparison tool

www.sawbenchmark.com

This website was developed in the Ecoinflow project.

Aim: Comparison tool for industrial practices regarding Energy Management in the European sawmill industry

Why was InnovaWood part of the team ?



Let's think about the benefits for these guys.



Illustration by Chris Gash

Scientists / Research Institutes:

- All core partners were recruited from the IW network. This was not a „must“, but partners knew each other very well before and IW is one of the reasons why they knew each other.
- New scientists came in because they were members of well known IW member organisations.
- IW supported in the proposal stage by addressing communication and dissemination activities in the Commission's language.
- In the project IW was responsible for communication and dissemination activities with the support of the scientific core partners.

Why was InnovaWood part of the team ?



Let's think about the benefits for these guys.



Illustration by Chris Gash

Sawmillers / industrial project partners:

- Presenting information in a clear, well structured and good visual appearance is a „must“ in communicating with practitioners and industry people. IW has special staff at hand that can provide support on short notice.
- In Europe language barriers still exist. Even though English is the standard language in EU-projects, a multi-lingual partner in a project is of great advantage. IW can provide this.

Why was InnovaWood part of the team ?



Let's think about the benefits for these guys.



Illustration by Chris Gash

Project administrator in funding organisation:

- IW knows what project admin people in the funding organisations want to hear and read.
- IW has gained a lot of experience in the past in preparing project proposals, in negotiating them after general approval, in structuring and laying out of deliverables and reports.
- IW can provide templates and standardised text blocks which can easily be modified to suit the individual project.
- IW knows about how to report about costs and how to fill cost statements correctly.
- IW can provide a well managed internet platform for hosting the project webpage.



**You should consider
making IW part of your team
when you start designing
your next project proposal
applying for EU-funding!**

Thank you for your attention

Visit us at www.ecoinflow.com

and for beanchmark tool at
[www. sawbenchmark.com](http://www.sawbenchmark.com)

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