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Initiative activities make huge savings possible

Borealis Polymers has involved its entire workforce at Kilpilahti, Porvoo in improving energy efficiency. Active involvement in what we call, initiative activities, and training of the staff in energy efficiency have yielded good results.

It is often the case that the best suggestions on developing energy efficiency come from where the work is actually performed. Initiative activities are designed to harness such suggestions and ideas. For them to work, staff training on these issues is needed, with active dialogue, and a readiness on the part of the company to receive proposals and to implement them.

Large volumes – large savings potential

Borealis is one of the biggest energy consumers in Finland. The annual energy consumption of the Kilpilahti unit is about 3700 GWh. In money terms, this corresponds to approximately EUR 170 million,

so even small improvements in energy efficiency will lead to significant financial savings.

Energy efficiency agreements and energy audits have been shown to be effective at Borealis. They have helped us to gain millions of euros as payback. Our current agreement period is valid until 2016. Without the systematic procedures involved with the agreement the current situation would hardly be possible.

At Borealis, improving energy efficiency represents long-term development in which the focus is on consumption of energy, heat and fuels. The basic tools are corporation-level development plans with the emphasis on savings potential, investment needs and the investment payback periods.



Borealis Polymers Ltd

The petrochemicals production unit of Borealis at Kilpilahti produces polyethylene and polypropylene. Approximately 75% of the production is exported, mainly to Scandinavia, Russia and East European countries. Borealis Finland currently has 950 employees and has been active in Porvoo for 40 years.



ENERGY EFFICIENCY agreements

Voluntary Energy Efficiency Agreements are an important means of furthering energy efficiency in Finland. The Energy Efficiency Agreements 2008–2016 comprehensively cover the industrial (industry, energy sector, service sector), municipal, property and building, oil (oil-heated properties and transport of heating and transport fuels), goods and public transport, and agricultural sectors. The agreement parties are ministries, industry associations, companies and communities. Hundreds of companies and communities with their thousands of sites have signed up.

www.energyefficiencyagreements.fi

Smaller measures also worth taking

Local observations and insights, and subsequent initiatives have revealed hundreds of targets for development. To address these development needs, training days were arranged for the entire staff on energy efficiency and emissions trade. Present at the training were all production and service employees at Borealis, Kilpilahti, i.e. more than 700 employees. We found several development targets that have proven to be significant. Many of the initiatives have been rapidly implementable, sometimes even without investment costs.

Production employees at Borealis have actively involved themselves in the project, and a lot of proposals for improvement and targets for development have been suggested. Involvement is supported by granting initiative rewards, which means that the initiator gains benefits from the improvement that is made.

Concrete examples are, for example, adjusting running times of devices and using automation when needed, or finding and fixing leaks in steam traps. We have also taken real-time energy monitoring displays into use. These are useful for the operator in charge and help to keep attention focused on energy efficiency.

Training and information packages

Staff information events convene the entire staff. We have also provided information briefings focusing on specific energy efficiency topics; the most recent of these was on emission trading. The information packages make it possible to deliver solid information explaining what it means to the individual employee or work unit. In parallel with the training

and briefings we have disseminated information over the Intranet.

Including initiative activities as part of developing energy efficiency is effective. Hundreds of pairs of eyes see more than just a few. It also makes it possible to collect ideas that would otherwise be left unnoticed. The key factor in initiative activities is expertise in production process which improves the ability to find targets for development.

Energy efficiency written into job descriptions

Energy efficiency is becoming a part of daily working life in the same way as security or environmental issues; action is taken immediately when problems are detected. Pumps or electric and steam tracing that have been left switched on can be turned off to prevent wasting energy. Borealis has come a long way in solving safety and environmental issues. They are recorded in several job descriptions and are part of daily work. Safety and environmental factors are now accompanied by energy efficiency.

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