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## **Energy Savings Opportunity Scheme (ESOS)**

ESOS has been established by the Department of Energy and Climate Change (DECC) in response to the requirement for all Member States of the European Union to implement Article 8 of the Energy Efficiency Directive ('the Directive'). In simple terms, an ESOS Assessment requires participants to do three things:

1. Measure their total energy consumption
2. Conduct energy audits to identify cost-effective energy efficiency recommendations
3. Report compliance to the Environment Agency (who are the scheme administrator)

To this end voestalpine Metsec have been monitoring energy costs since 2004 and using these figures to highlight areas for energy use reductions, commissioned an energy audit through the Confederation of British Metalworkers (CBM) and submitted the findings to the Environment Agency.

To assist with complying with the ESOS regulations voestalpine Metsec enlisted the help of the CBM to conduct an energy audit across the Broadwell Road site and identify cost-effective energy efficiency recommendations.

The audit report was completed on 28<sup>th</sup> July 2015 and the following recommendations were highlighted.

- Turning off the compressors between shifts. At present Metsec use variable drive compressors to assist with the fluctuations in demand for compressed air. So the saving highlighted was between shifts. The only issues with this are someone would need to be here out of hours to turn on/off the compressors and there are start-up issues with the hydraulic packs getting up to power. Another issue potentially is a safety issues with de-coiler mandrels that could close when the power is off causing a coil to fall off. This would need further analysis and costed before agreeing to move forward with the project.
- voestalpine Metsec have started a programme of installing Variable Speed Drives to bending machines. The survey recommended carrying this over to other machines to make further energy savings. This is now taking place.
- The survey highlighted savings that could be made concerning the weld extraction. However this would need labour to make changes to the system each time one of the weld jigs are not being used and but this labour cost is not accounted for in the calculations. Also changes to the damping could affect the air flow at the other weld guns giving issues with the quality of weld as currently all system is balanced so the extraction does not affect the weld. Due to these issues at this point would not be followed up.

On the whole the survey has highlighted where further energy savings can be made and these are being progressed.



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