

# Capital Valley Plastics

0% APR Energy Efficiency Loans for small businesses in Wales



Capital Valley Plastics manufacture polythene membranes for the construction and packaging industries, using blown and cast extrusion lines. With the help of a Carbon Trust 0% APR Energy Efficiency Loan, they increased their production line efficiency and cut their carbon emissions.

## Technical approach

Capital Valley use extrusion machines to produce blown plastic film. The plastic pellet is fed into the barrel of the machine, where it is heated until molten, and then forced at pressure through the barrel by a screw, which is powered by a 300Kw motor.

Capital Valley worked with the Carbon Trust to review every stage of their processes. Flaws were identified which were causing their machines to run inefficiently, operating at a high output and taking longer to produce a set amount. It was identified that the screw and barrel could be re-engineered to increase their efficiency and therefore decrease the power and CO<sub>2</sub> used to produce the same amount.

Their machines ran 24 hours a day, 5 days a week. Before re-engineering, one of the machines produced 315Kg per hour. After the upgrade, it now produces 400Kg per hour. This has enabled Capital Valley to produce the same amount in one day less, using less energy and less CO<sub>2</sub>.

Implementation of the project required careful planning, given the need to put the production line out of action for periods of time. One advantage of the down-time has been the ability for Capital Valley to re-engineer parts of their processes. This will increase their output capability longer term, enabling them to manufacture more goods and bring lead times down for their customers.

## Interest-free loans

Interest free loans are available to small and medium-sized businesses in Wales wanting to reduce their energy bills and carbon footprint by installing more efficient equipment and renewable technologies. Businesses must have fewer than 250 employees to qualify and the size of loan offered is based on the CO<sub>2</sub> savings of the project, which will be assessed by the Carbon Trust. A range of energy efficient building and industrial process technologies are considered, including lighting, heating, refrigeration, air conditioning, pipe insulation, motors and biomass. Eligibility criteria and terms and conditions apply.



## SAVINGS AT A GLANCE

**£60,000**

Savings a year on energy bills

**1 day**

Reduction in production time

**25%**

Reduction in carbon emissions



“In a time when banks seem unwilling to lend to SMEs, the Carbon Trust proved an enthusiastic and knowledgeable partner to help us achieve our environmental targets.”

Richard Haigh, Capital Valley Plastics

You will be required to make repayments on the loan irrespective of whether the reduction in energy cost equals the loan repayments. The Carbon Trust is authorised and regulated by the Financial Conduct Authority for consumer credit. Representative Example: A £12,000 loan over 48 months = monthly repayment of £250. Total repayable £12,000.

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