

## **Efficient Air launches Heatcatcher - the way to cheaper electricity from on site waste heat**

ESTA member and established HVAC inspection and survey specialist Efficient Air has formed Heatcatcher Ltd, a business set to exploit with new technology the generation of low carbon, cheaper electricity from on site waste heat.

According to business principal, Darren Bryant: “ Up to 30 per cent of the heat generated by a site can be lost to waste heat. Some of this might be ‘captured’ to provide hot water, but the significant residue is often wasted.”

Focusing on the generation of low carbon, cheaper electricity from on-site waste heat, Heatcatcher has developed a process — based on Organic Rankine Cycle technology — for use where fossil fuels have been combusted, or from a carbon neutral heat source such as a biomass boiler or biofuel generator.

Heatcatcher's technology allows the generation of cheaper, carbon-free, electricity from this waste heat, to match electricity demand. The Heatcatcher system takes the form a heat exchanger (evaporator) retrofitted to the exhaust of the waste heat-emitting machine. The heat is transferred through a thermal liquid pumped to the Heatcatcher Generator Unit, heating and pressurising an organic gas, and forcing it to expand through a micro turbine, generating electricity. This expanded gas then needs to be cooled to a liquid through the condenser unit to start the cycle again.

The figures make good reading. Based on annual operating hours of 8520 and a waste heat input power of 380kW, Heatcatcher can generate 426,000kW/hrs of carbon-free electricity annually and save 234 tonnes of CO<sub>2</sub>. A waste heat input power of 1520kW/hrs generates 1,704,000 kW/hrs and saves 937 tonnes of CO<sub>2</sub>, and 7600kW produces 8,520,000kW/hrs of electricity and saves 4686 tonnes of CO<sub>2</sub>.

Darren Bryant already reports considerable interest from a modest initial mailshot, and is keen to start a pilot programme on a major industrial or commercial site in the near future.

“With the new technology from Heatcatcher you can now generate your own cheaper, carbon free, electricity from this waste heat, which will also match electricity demand, as well as meet your climate change obligations.”

More information from [www.heatcatcher.com](http://www.heatcatcher.com), or by contacting [enquiries@heatcatcher.com](mailto:enquiries@heatcatcher.com) or calling either Darren Bryant or Julian Jowitt on 01825 748150.