The forgotten resource...
Did you know that 60-70% of all produced energy is thrown away? In other words, we waste something like $10,000,000,000,000 each year!

Waste heat is one of the largest unexploited energy resources in the world. But until now, materials for upcycling waste heat to electrical energy have either been very expensive, used lead compounds, or could not operate above 200 °C.

Now, the Danish company TEGnology has the solution in terms of two economic, efficient and cleaner materials for the conversion process – allowing you to win some of the lost energy back. This means that some very compelling goals can be achieved such as better fuel economy, less CO₂ emission and lower manufacturing costs.

This technology is highly relevant to the automotive industry. It has the potential to make multiple impacts, improving efficiency in everything from heavy goods vehicles to high-end sports cars. Other applications include:

- Stationary power – from wood burning stoves to power plants
- The maritime industry
- Heavy industry
- Remote sensors

Thermo electric materials and components
In cooperation with Aarhus University, TEGnology has developed two new ground-breaking energy materials that can be used advantageously for energy optimization in several markets. The two new materials are based on Zinc Antimonide and Magnesium Silicide. These materials are capable of transforming a temperature difference to electricity at higher temperatures than before.

- Temperature range up to 400 °C
- Lead free
- Low material cost

Energy harvesting with TEGnology
Our module functions as a thermo electric system. Here, you see the device assembled. The device converts heat flow directly into electrical energy.

We strive to reduce waste
TEGnology has worked closely with researchers from Aarhus University and the German Aero-Space Institute to develop an energy harvesting technique based on new, unique energy materials that convert waste heat into electricity.

With the introduction of these new materials, TEGnology will be the first company on the world market with a technology that so effectively exploits waste energy.
Want to learn more about TEGnology?
- Don’t hesitate to contact us!

TEGnology ApS
Lysholt Allé 10
DK-7100 Vejle

Visit www.TEGnology.dk to learn more!