Knauf Insulation is enjoying major growth in the oven insulation business.

“We have” very high goals – we want to become number one globally, not only in insulation solutions for ovens, but also for domestic appliances as a whole,” says Uroš Cotelj of Knauf Insulation’s Original Equipment Manufacturer (OEM) division.

“We will achieve this with our advanced insulation solutions which are fully compliant with the most demanding European standards. In 2008, only a minor part of our insulation solutions for ovens, manufactured in Europe were provided by us, but by 2014 we were on track to provide insulation to a more significant part of the market.”

And that’s a lot of saved energy. And a lot of saved CO₂.

Due to demanding European energy standards, oven producers, like many other domestic appliance manufacturers, now require high levels of energy efficiency for their appliances.

And Knauf Insulation’s OEM team with its own laboratory in Škofja Loka in Slovenia is increasingly being recognised as a strategic development partner even in the early planning stage of new appliances.

“When their basic prototypical device is developed, on the basis of our expertise, experience and extensive measurements of energy efficiency of newly developed ovens, the best possible insulation solution is found,” says Cotelj.

For example, the upmarket Bauknecht M612, recently placed an order for OEM insulation solutions for 55,000 of its ovens. After comprehensive measurements in Knauf Insulation’s laboratories, the newly-designed and tailor-made OEM insulation solution saves 12% more energy than the previously used insulation and places the ovens in a high energy efficiency class.

Annually, that’s an average saving of 14.6 kg of CO₂ per oven or 814 tonnes of CO₂ for the entire order. “We are further extending our environmental impact from all the measurement equipment acquired last year helps us find and indicate any and every deviation such as energy leakage or non-efficient use which finally helps us determine what kind of product is needed,” says Cotelj.

“New markets are actively seeking us out for our energy-saving solutions and we will continue to build on our success.”

Of course oven manufacturers are just one industry that calls on OEM for insulation design expertise. Others include manufacturers of prefabricated building elements, doors, road sound barriers, industrial appliances and more.

Within each industry OEM provides customised solutions. For sandwich panel manufacturers, OEM provides high-performing insulation materials that among others represent the most cost-effective solution in the global effort to save energy, while for road barriers the division offers bespoke solutions designed to meet specific noise-insulation requirements.

Knauf Insulation’s Urbanscape® is transforming desert landscapes.

SITUATED ALONG Highway 40 in the heart of the desert landscape of Kuwait something extraordinary is happening.

After hours of unremitting desert sandy views, there is a brief respite in the form of a handful of lush green fields.

These are the test fields of Knauf Insulation’s Urbanscape where verdant greenery grows on top of harsh desert sand and where the landscape can bake in summer temperatures of over 50°C.

“We were carrying out the tests to demonstrate to potential clients exactly how resilient Urbanscape can be in the Middle East and the results have been extremely encouraging. We are now discussing plans for extensive use throughout Kuwait,” says Jure Šumi, Knauf Insulation’s Business Development Director Green Solutions.

In other Middle Eastern Urbanscape pilots, 270 trees are being grown in desert greenhouses and 27 trees are flourishing in a barren desert space being planted as part of a unique ‘forestation project’.

So why is the product so successful?

Urbanscape products are made from natural Mineral Rock Wool fibre and can hold as much as 122% more water than sites without the material, says Šumi.

All Urbanscape products absorb and store water when it is available and release it when there is not enough, which makes it ideal for challenging environments such as deserts.

“There are ambitious plans in some parts of the Middle East to create green areas in the desert but clearly there are considerable practical issues such as intense heat and water sources to consider,” says Šumi.

“However, we are delighted that Urbanscape is proving to be a valuable support system in the realisation of these dreams.”

Urbanscape’s versatility has now extended into other areas where applications have included the greening of golf courses and extensive agricultural use.

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Read more in our Sustainability Report 2014