

DOUBLE SUSTAINABILITY SUCCESS

Two of our key 2020 sustainability targets were achieved in 2016 following a 20.9% reduction in energy use and a 25.1% cut in CO₂ emissions.

In 2010 we set ourselves two critical aims – to reduce our energy use and CO₂ emissions by 20% by the year 2020. We are delighted to announce that in 2016 we exceeded both.

Across Knauf Insulation we cut energy use by 20.9% and CO₂ emissions by 25.1%.

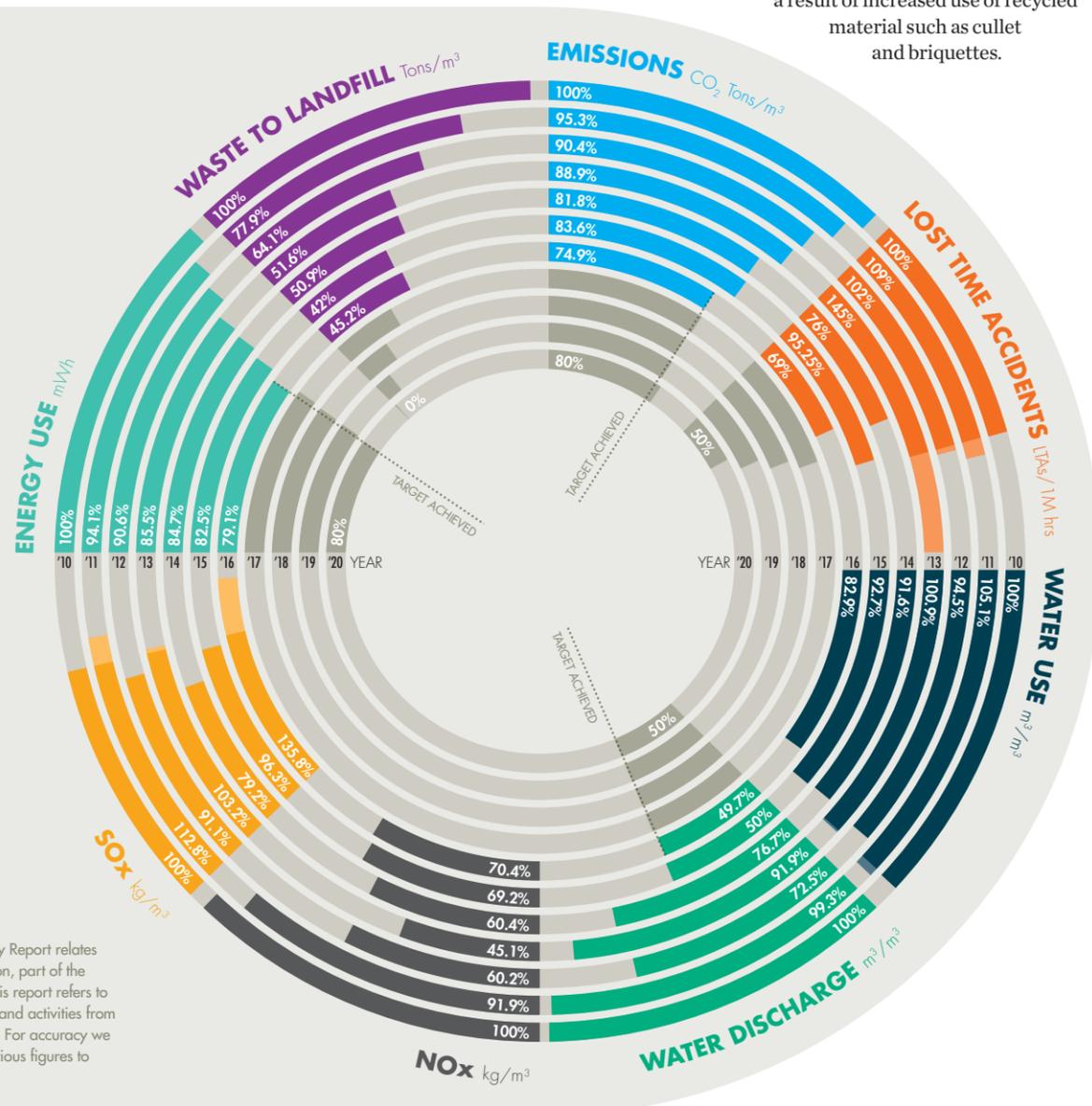
“2016 is a major landmark for the company. In just six years we have managed to achieve two of our most important 2020 sustainability goals,” said Philippe Coune, our Group HSE, Performance & Sustainability Manager.

“Such an incredible achievement is a tribute to the huge commitment from everyone across the company to improve energy management every single day and the future vision of the company to invest in cleaner, more efficient technology.”

“We should be very proud of what we have achieved in such a short period of time and I’m looking forward to building on this success in the years to come.”

In other areas, we have achieved a reduction in waste to landfill of 54.8% compared to our 2010 baseline and, over the same period, decreased water use by 17.1% and cut water discharge by 49.7%.

Our NOx emissions have remained static, but our SOx emissions have increased by 35.8% compared to 2010 as a result of increased use of recycled material such as cullet and briquettes.



This Sustainability Report relates to Knauf Insulation, part of the Knauf Group. This report refers to data from 2016 and activities from 2016 and 2017. For accuracy we may amend previous figures to new definitions.

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

United Nations countries have adopted a series of Sustainable Development Goals with the aim “to end poverty, protect the planet and ensure prosperity for all” by 2030. Here is how Knauf Insulation is contributing to these goals:



3. GOOD HEALTH AND WELL-BEING

UN goal: ensuring healthy lives and promoting the well-being for all at all ages is essential to sustainable development.

We create products – such as Heraklith Wood Wool or our solutions with ECOSE Technology – that enhance building comfort and contribute to improved acoustic health and air quality. Besides our internal policy states we are committed to “ensure the health, safety and welfare of our employees and anyone else affected by our activities... and strive to continually improve our safe working environment”.

9. INDUSTRY, INNOVATION AND INFRASTRUCTURE

UN goal: investments in infrastructure – transport, irrigation, energy and communications technology – are crucial to achieving sustainable development.

Knauf Insulation is committed to the creation of near-zero energy-use buildings and supports campaigns for the energy-efficient renovation of existing building stock to be considered as infrastructure investment. Throughout our company we ensure “continual improvement in performance with regard to matters of product quality, energy, environment and health and safety.”

10. REDUCED INEQUALITIES

UN goal: to reduce inequality, policies should be universal in paying attention to the needs of disadvantaged and marginalised populations.

Knauf Insulation believes that the energy-efficient renovation of buildings must play a role in reducing the fuel poverty that impacts 11% of Europeans.

11. SUSTAINABLE CITIES AND COMMUNITIES

UN goal: to create cities of opportunities for all with access to basic services, energy and housing while improving resource use and reducing pollution and poverty.

Our public affairs teams campaign worldwide for more energy efficient buildings to create a more sustainable future for our cities and communities. Many of our products are created from recycled materials, while systems such as our Urbanscape® Green Roof Solution contribute to efficient stormwater management.

12. RESPONSIBLE CONSUMPTION AND PRODUCTION

UN goal: sustainable consumption and production aims at ‘doing more and better with less’.

Our Glass Mineral Wool is made with up to 80% recycled glass, while our Rock Mineral Wool contains recycled steel slag. We are on target to produce zero waste from manufacturing sites to landfill by 2020. We are committed to “having zero negative impact on resource use” in line with our company policy.

13. CLIMATE ACTION

UN goal: climate change is impacting lives worldwide. Implementation of the Paris Agreement – to limit global temperature rise – is essential to achieve the UN’s sustainable development goals.

Knauf Insulation is a strong supporter of the Paris Agreement and our company is dedicated to the manufacture of solutions that help tackle climate change. Besides we have already reduced our company’s CO₂ emissions by 25% since 2010.

15. LIFE ON LAND

UN goal: deforestation and desertification caused by human activities and climate change – pose major challenges to sustainable development.

All material for our Heraklith Wood Wool is sourced from woods audited by the Forest Stewardship Council or Programme for the Endorsement of Forest Certification. Our Urbanscape Landscape Solution has also been used to help sustainable development of green areas of Middle Eastern desert.

16. PEACE, JUSTICE AND STRONG INSTITUTIONS

UN goal: peaceful, inclusive and sustainable societies are built on access to justice for all and effective, accountable institutions.

Our code of conduct highlights our commitment to ethical and lawful conduct, fair competition, a rejection of corruption and bribery in any form, a pledge to fair conditions of employment, tolerating no discrimination and an obligation to protect the environment and natural resources.

17. PARTNERSHIPS

UN goal: successful sustainable development requires partnerships between governments, the private sector and civil society.

Knauf Insulation works with policy makers and non-profit organisations to promote issues related to better sustainable buildings from improved fire safety to better energy efficiency.



The fact that we have already achieved our 2020 target of reducing energy use by 20% is a major tribute to everyone at Knauf Insulation.

In 2016 our energy use was 20.9% lower than our 2010 base year and 3.4% lower than 2015.

There have been many factors that played a role in this achievement including a company-wide commitment to continuous training, constant checks, reinforcing efficiency awareness, regular feedback from operators, the sharing of best practices and the installation of new cleaner technology.

Our North American plants in particular have contributed significant reductions to the overall figure. Production improvements have been implemented marking a decrease of 35% in US energy use in 2016 compared to 2010.

Adding further momentum to our energy-saving initiatives has been a dedicated focus on ISO recertification in all our manufacturing plants.

Berin Onur, Group HSE Manager Systems Processes & Energy, said: *“Achieving recertification of all four standards – ISO 9001 (Quality Management), ISO 14001 (Environmental Management), ISO 50001 (Energy Management) and OHSAS 18001 (Occupational Health and Safety Management) – is testament to the hard work of colleagues from across our regions to honour our commitments to continuous improvement across all key sustainability metrics.”*

In 2010, Knauf Insulation was one of the first companies in its sector to achieve all four standards for European, US, Russian and CIS plants. The latest achievement is significant because four new plants – Albion, Inwood, Ajdovščina and Eskisehir also received certification.

LOCAL INITIATIVES

VISÉ, BELGIUM

Our packaging system zone at Visé is now energised by solar power following the installation of 920 photovoltaic panels – around 1,500m² – on the plant’s warehouse roof. The panels offer a total capacity of +/-250kW peak power.

ST EDIGIEN, GERMANY

Our St Edigien plant achieved an impressive 9% reduction in energy use for compressed air resulting in 170 MWh less consumption. The reduction is the result of regular surveys, frequent plant tours and awareness training.

AJDOVŠČINA, SLOVENIA

HSEEQ manager Natalija Domjanič received our East European HSEEQ Leadership Award for her work with the team at Ajdovščina. In addition to HSE successes, implementation of KIMS for our ISO standard certification by Bureau Veritas, improvements were achieved in energy management, particularly compressed air handling and lighting performance.

ALBION, NORTH AMERICA

New power monitors and a public data base at Albion enabled the plant to balance system loading to reduce energy and cut the operating pressure of the air system from 105 psi to 95 psi. Other initiatives included leak monitoring and fixes; the installation of LED lights and energy awareness meetings. A further 7.5 million btu was saved in heating energy by closing off plant exterior walls using unsaleable insulation panels.

KRUPKA, CZECH REPUBLIC

Krupka’s energy management was described as *“well implemented and a strong part of the integrated system with improved knowledge and communication on a plant level”* by auditors Bureau Veritas. The comments came following recertification in ISO 9001 (Quality Management), ISO 14001 (Environmental Management), ISO 50001 (Energy Management) and OHSAS 18001 (Health and Safety Management)

NORTH AMERICA

Our North American plants have seen a dramatic 35% decrease in energy use in 2016 compared to 2010 as a result of production optimisation. Measures such as the reduction of fiberisation units, the introduction of variable speed fans and improved energy measuring have all contributed to the reduction.

WATER

We have seen a decrease in water use of 9.8% in 2016 compared to 2015 and our water discharge has been cut by 0.3% during the same period.

In 2015 we celebrated a breakthrough year after achieving our 2020 target of reducing water discharge by 50% compared to our 2010 baseline year.

As for water use across the company, we have cut our usage by 17.1% compared to 2010 following a series of key initiatives such as using river water instead of potable water, the installation of wells and a major project at St Edigien.

LOCAL INITIATIVE

KRUPKA, CZECH REPUBLIC

The installation of a 161m-deep water well at Krupka has released huge reserves of non-drinkable ‘ground water’ for our manufacturing processes and cut the plant’s use of city drinking water by 30%.

EMISSIONS

In a landmark year that has already seen us achieve our 2020 energy saving target – we are delighted to announce that we have also cut our CO₂ emissions across the company by 25.1% compared to our 2010 baseline year.

“Our 2020 CO₂ target was a reduction of 20%, so to surpass that by 5% is a great achievement and – as always – a tribute to the dramatically improved awareness of energy use at our plants,” said Philippe Coune, our Group HSE, Performance & Sustainability Manager.

“The reduction is also in part down to a move to better technology. We have replaced two of our coke fuelled melters with gas systems which has helped contribute to lower emissions.”

While emissions of NOx have remained static from 2015 to 2016, emissions of SOx have increased by 39.5% during the same period.

“Across the company we are using more and more recycled material in the form of glass cullet and briquettes. Increased SOx emissions are unfortunately the inevitable result of using more of this material,” said Philippe.

WORLDWIDE

Knauf Insulation is pioneering the introduction of hybrid and full-electric cars across the company. More than 900 company cars are used by colleagues in Europe, Russia and North America and plans are underway to reinforce the incentive scheme and move the environmentally-friendly car fleet to the next level. *“We have not heard of any other major company carrying out a switch to green company cars on such a scale and we are delighted to be at the forefront of such a major commitment,”* said Patrice Briol, Knauf Insulation’s Group Human Resources Director.

Our company-wide goal is to convert our entire product range to ECOSE Technology. ECOSE Technology is made without the addition of any acrylic or artificial dyes and is mainly derived from rapidly renewable materials and contains no added formaldehyde. Our Glass Mineral Wool with ECOSE, for example, is certified by Eurofins Gold as an ‘outstanding material’ according to the Volatile Organic Compounds Indoor Air Quality emissions regulation.

LOCAL INITIATIVES

ST EDIGIEN, GERMANY

To achieve our target of cutting CO₂ emissions by 20% from our baseline year of 2010 to 2020 requires a reduction of 2% each year. At St Edigien we achieved a reduction of 3% from 2015 to 2016. This was as a result of the database storage of best practice settings from all operators which show shifts’ best practice energy performance indicators and stable processes. Energy consumption is also analysed on a daily basis and deviations tackled with best practice behaviour settings. The initiative has also seen compressed air consumption drop by 9%.

WASTE

2016 saw a slight increase of 3.2% in the amount of waste we send to landfill compared to 2015.

However, we are still on track to achieve our 2020 ambition of zero waste with an overall 54.8% reduction since 2010.

Company-wide our Nova Marof and Krupka plants continue to maintain their zero-landfill status while most of our UK plants returned to zero after sourcing suppliers who are able to use our waste for other products such as tiles.

So, what is behind the 3.2% increase? The start-up of a new production line at our Lanett and St Edigien plants lead to higher scrap rate, while St Helens is now in the process of sourcing a waste-handling supplier after being zero waste to landfill for many years.

LOCAL INITIATIVES

ST HELENS, UK

A new £10 million facility next to our St Helens plant will refine tens of thousands of tonnes of recycled glass into ‘furnace ready cullet’ that can be fed into the plant and spun into Mineral Wool. The furnace-ready glass reduces waste to landfill and keeps high quality glass in circulation.

STUPINO, TYUMEN, RUSSIA

Stupino has cut the amount of waste to landfill by 80% from 2015 to 2016. Rather than sending line bale scrap to landfill, the plant is now selling it as raw material for ceiling tile production. At Tyumen waste to landfill has been reduced by 40% following a separate plant waste collection initiative for external recycling and plans are underway to also sell bale scrap from the line.

SIMBACH, GERMANY

Off-cuts from our Simbach plant are being used as secondary material at our St Edigien plant in Germany.