

URSA's sustainability report Insulation is energy



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Turning sand, one of the most abundant resources on our planet, into the cleanest energy source

01. Insulation is energy

We need to act on climate change and energy security

Europe is exposed to external risks. We can and must reduce this exposure, and one of the best options is not yet obvious to all.

Political events and the instability of the past couple of years have shown just what an unstable place Europe actually can be. It also gives us a pretty good idea of what the future brings: more uncertainty. There is only one possible strategy in such conditions – do the right things, and do them fast. Energy efficient renovation of building stock is the right thing to do, under any circumstances. It brings an immense set of benefits.

Europe is completely exposed to external political crises outside its boundaries, since, among other things, we are fully dependent on energy imports. To some extent, Europe is acting on the key initiatives of the Energy Union initiative, its 2020 and 2030 objectives, but more vigorous action is desperately needed.

Buildings are key. Ambitious renovation of European building stock provides much needed energy savings, generates jobs, reduces CO₂ emissions and offers more security for the whole continent. Europe needs a "Buildings Marshal plan" for decades to come, to bring building stock to a nearly zero energy level.

URSA is confident we're on the right path, no matter what challenges we may face on our way. Though the economic situation of today is not stable in Europe, the underlying basis of our activity is sound for decades to come.

Together with our partners, we will continue making an effort to spread understanding of the true benefits of Energy Efficiency, and keep it at the top of the political agenda in Europe, where it deserves to be.

Preparing the ground for growth.

Two years ago, a deadly earthquake struck the Emilia Romagna region in Italy. This was a dramatic situation in which URSA lost a colleague and had a factory fully destroyed. It was a critical moment but we knew that extraordinary situations require extraordinary effort. We believe that since then, as a team, we have become stronger. Thanks to our full engagement with the local community and authorities URSA managed to rebuild the factory and restart production at the beginning of 2015. We installed state of the art technology to be able to serve our customers even better.

We walk the talk. The factory is there, operating again. Importantly, it also is saving energy every day, as we have insulated the plant to the highest energy efficiency standards. Our actions send the best message to our partners.



Pepyn Dinandt CEO URSA Insulation





URSA is proud to reopen the Bondeno XPS factory after the earthquake.



Executive summary of the report

Climate change is undeniable. We are only increasing the cost of mitigation.

The pace of changes taking place in nature is now the fastest in history. In this report, we will show that a mix of awareness, political willingness and ambition can revert the trend, and that solutions are already available today. The key is deep energy renovation of European building stock.

Deep energy renovation would also unlock a number of other benefits such as economic growth and a more competitive European economy, better public health and finances, reduced fuel poverty and energy security.

- **_ Climate patterns** are changing. The number of natural disasters has multiplied in the last 30 years.
- **_ Recent IPCC** reports claim things will only get worse. Big cities will be less habitable, and their climate even more hostile.
- **_____Scientific evidence** points out that increased levels of CO₂ in the atmosphere are responsible for increased temperatures and the greenhouse effect.



Thermal insulation has a great potential to reduce energy demand and CO₂ emissions from buildings.



- (A) Polar bears, one the species that are most threatened by climate change.
- (B) Most of the buildings in this picture will still be standing in 2050. European building stock needs to be renovated to deep energy standards.

Solutions to stop climate change exist. Deep energy renovation of building stock is one.

- **_ Europe must reduce its dependency** on energy imports, in order to increase energy security.
- Buildings are key contributors to CO₂ emissions, as they consume a significant amount of energy (around 40% in EU).
- **Buildings also have the biggest potential to save energy** and reduce CO₂ emissions.
- _ We need to act as soon as possible. URSA is proud to be in the Energy Efficiency in Buildings sector, as this is where action needs to take place.
- **_ Technical solutions** that would enable nearly zero energy building construction exist today. Insulation is one of them and it is also an energy source.
- **Europe needs an ambitious Deep Energy Renovation plan** for its building stock. We believe that awareness and consciousness on the part of the general public and political leadership and ambition to drive the desperately needed change are vital.





The European energy dilemma: Pressure to change but little action.

One side, Europe is faced with a set of factors that should normally create more ambitious energy efficiency policies – climate change, dependency on energy imports and fuel poverty.

On the other, Europe could harvest multiple benefits – a cleaner environment, increased energy security, economic growth and jobs, an improved trade balance and public finances, better public health and higher productivity.

But something is missing. The European political leadership and the general public both fail to see the connection.



URSA: A leading insulation provider

URSA is a leading European building insulation provider with headquarters in Madrid and turnover of around 500 Million Euros. We focus on glass mineral wool and extruded polystyrene (XPS) to insulate residential and non-residential buildings, both new and being renovated.

URSA has 13 production sites in nine countries and a commercial presence in around 40 markets in Europe, the Middle East and Northern Africa. We employ around 1,800 people in countries including Austria, Belgium, the Czech Republic, France, Germany, Italy, Poland, Russia, Slovenia, Spain and the UK.





60 years of insulation expertise.

URSA's history dates back to 1949, when POLIGLAS began producing insulation materials in Spain. In 1988 POLIGLAS was acquired by the Uralita Group. In 1991, the German firm Pfleiderer AG entered the insulation business.

POLIGLAS, now owned by Uralita, expanded predominantly in Western Europe through the construction of new factories. Pfleiderer concentrated on growing business in Eastern Europe. In 2002, the Uralita Group purchased Pfleiderer's insulation division. URSA, made up of what was POLIGLAS and Pfleiderer was officially born in 2004. We have not stopped expanding within Europe and beyond, launching innovative and award winning insulation products.

Since our beginning we have been entirely dedicated to the production and sales of building insulation materials that reduce energy consumption and CO₂ emissions.

	2013	2014
Revenues (Mio. EUR)	415	409
Markets where we are present	41	41

URSA key figures.



Over the last decade we have engaged with sustainability with much greater intensity than ever before, making sure we are a partner to rely on in the long run. This has involved looking hard at our performance in the different areas of sustainability: social, economic and environmental.

Starting in 2006, we implemented an action plan to reduce accident levels that has yielded very positive and promising results. We have improved the efficiency of our factories and reduced energy use and CO₂ emissions. Over the last decade we have significantly improved our products, reaching very low levels of thermal conductivity and higher thicknesses and enabling our customers to save more energy in their homes and offices.

We are positive about what the future could bring – more energy efficiency, more comfort, more quality of life.

Reasons why you should take it seriously

02. Climate change

Why should you take the climate change seriously

There are very clear signs that climate change is actually taking place. The number of extreme weather -and climate- related events is rising. Serious storms have more than doubled in frequency since the early 1980s. Floods and heat waves have tripled or worse. Some irreversible processes are taking place, impacting weather patterns and making them more severe. The consequences for humanity may be serious. A global vision and understanding is needed to address this threat to our planet.

During recent summers we have witnessed extreme heat waves all over the globe. By mid summer of 2015, average temperatures have been the highest since record-keeping began. For example, India, was struck by a deadly heat wave in May 2015. Temperatures as high as 47°C caused 2,200 deaths. Another heat wave, in Pakistan, claimed the lives of hundreds more. A study published by the Lancet Commission on Health and Climate Change (June 2015) suggests that previous estimates of the future effect of global warming on health, made by the World Health Organisation and the Intergovernmental Panel on Climate Change, are underestimates because they failed to take into account vulnerabilities caused by ageing, migration and population growth.

The number of extreme weather -and climaterelated events has multiplied in frequency since the early 1980s.



Disasters caused by weather and climate.



• Meteorological events (storms)

Hydrological events (floods, landslides and avalanches)

• Climatological events (extreme temperatures, droughts, forest fires)



Obama: No challenge poses a greater threat than climate change.

The subject of climate change is finally enjoying the importance in US government policy it deserves. This is expected to have a positive impact on global awareness and should lead to real action and stronger cooperation in climate change mitigation globally. In his 2015 State of the Union speech, President Obama said:

"No challenge - no challenge - poses a greater threat to future generations than climate change. 2014 was the planet's warmest year on record. Now, one year doesn't make a trend, but this does -14 of the 15 warmest years on record have all fallen in the first 15 years of this century." "I've heard some folks try to dodge the evidence by saying they're not scientists; that we don't have enough information to act", he continued. "Well, I'm not a scientist either. But you know what - I know a lot of really good scientists at NASA, and NOAA, and at our major universities. The best scientists in the world are all telling us that our activities are changing the climate, and if we do not act forcefully, we'll continue to see rising oceans, longer, hotter heat waves, dangerous droughts and floods, and massive disruptions that can trigger greater migration, conflict and hunger around the globe. The Pentagon says that climate change poses immediate risks to our national security. We should act like it. That's why, over the past six years, we've done more than ever before to combat climate change, from the way we produce energy to the way we use it".

Climate change is happening now



1921

2009

We should act to stop or limit it.

We can already see the negative impact of climate change already today.

The average concentration of CO_2 in the atmosphere in 2014 was 398 ppm, which is more than 140% higher than in pre-industrial levels. This indicator is tracked by the Mauna Loa Observatory in Hawaii. When records began being kept in 1956, CO_2 concentration was 316 ppm. Carbon-dioxide emissions have risen relentlessly and in the last couple of years the level of carbon dioxide in the atmosphere increased at its fastest rate for 30 years. (1)

The globally averaged temperature over land and ocean surfaces for June 2015 was the highest for the month of June since record keeping began in 1880. So far, the year 2015 is the warmest on the record. (2)

The polar ice caps have melted faster in than last 20 years than in the previous 10,000. A comprehensive satellite study confirms that melting ice caps are raising sea levels at an accelerating rate.

It is expected that between 70% and 99% of Everest's glaciers will be lost by the end of the century.

According to projected CO_2 concentrations in 2100, only the glaciers at the altitude of above 7.000 metres will remain.

It's all about how we adapt to climate change, not whether it's taking place - IPCC.

Human Interference with the Climate System is clear and undeniable, states the Intergovernmental Panel on Climate Change (IPCC) in its 5th report.

The Intergovernmental Panel on Climate Change (IPCC) is the leading international body for the assessment of climate change. It was established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988 to provide the world with a clear scientific view on the current state of knowledge about climate change and its potential environmental and socio-economic impacts.

IPCC defines climate change as a change of climate which is attributed directly or indirectly to human activity that alters the composition of





the global atmosphere and which is in addition to natural climate variability, observed over comparable time periods.

In recent decades, changes in climate have impacted on natural and human systems on all continents and across the oceans. Evidence of climate-change impacts is strongest and most comprehensive for natural systems.

The impact of recent climate-related extremes, such as heat waves, droughts, floods, cyclones, and wildfires, reveal significant vulnerability and exposure of some ecosystems and many human systems to current climate variability. These include alteration of ecosystems, disruption of food production and water supply, damage to infrastructure and settlements, morbidity and mortality, with consequences for mental health and human well-being. For countries at all levels of development, these impacts are consistent with a significant lack of preparedness for current climate variability in some sectors.

Key risks across sectors and regions

Wide range of sectors under threat of climate change need adaptation policy.

Dangerous anthropogenic interference with the climate system is already causing severe impact on a wide range of sectors. The 5th IPCC report digs into details of key risks.



1. Freshwater resources.

The freshwater-related consequences of climate change increase significantly with increasing greenhouse gas concentrations. The percentage of the global population experiencing water scarcity and the fraction affected by major river floods will increase with the level of warming in the 21st century. Climate change is predicted to reduce renewable surface water and groundwater resources significantly in most dry subtropical regions, intensifying competition for water among sectors.

2. Terrestrial and freshwater ecosystems.

A large proportion of both terrestrial and freshwater species faces increased extinction risk under projected climate change, especially as climate change interacts with other factors such as habitat modification, over-exploitation, pollution, and invasive species.

3. Coastal systems and low-lying areas.

Due to sea level rise, coastal systems and low-lying areas will increasingly experience adverse impacts such as submergence, coastal flooding, and coastal erosion.

4. Marine systems.

Global marine-species' redistribution and marine-biodiversity reduction in sensitive regions will challenge the sustained provision of fisheries productivity and other ecosystem – related services.

5. Food security and food production systems.

All aspects of food security are potentially affected by climate change, including food access, utilisation, and price stability. For example, the major crops (wheat, rice, and maize) in tropical and temperate regions.

6. Livelihoods and poverty.

Climate-change is projected to slow down economic growth, making poverty reduction more difficult, further eroding food security, and prolonging existing and create new poverty traps, particularly in urban areas and emerging hotspots of hunger.

7. Urban areas.

Heat stress, extreme precipitation, inland and coastal flooding, landslides, air pollution, drought, and water scarcity pose risks in urban areas for people, assets, economies, and ecosystems. Risks are amplified for those lacking essential infrastructure and services or living in poor-quality housing and exposed areas.

Reducing basic service deficits, improving housing, and building resilient infrastructure systems could significantly reduce vulnerability and exposure in urban areas.

8. Rural areas.

The impact on water availability and supply, food security, and agricultural incomes, including shifts in production areas of food



and non-food crops across the world is predicted to be considerable.

9. Key economic sectors and services.

For most economic sectors, changes in population, age structure, income, technology, prices, lifestyle, regulation, and governance are projected to be large, relative to climate change.

10. Human health.

Until the mid-21st century, projected climate change will impact human health mainly by exacerbating health problems that already exist. Climate change is expected to lead to increases in ill-health in many regions and especially in developing countries with low income, as compared to a baseline without climate change.

11. Human security.

Climate change is projected to increase the displacement of people. Climate change can indirectly increase risks of violent conflicts in the form of civil war and inter-group violence by amplifying well-documented drivers of these conflicts such as poverty and economic shocks.

The impact of climate change on the critical infrastructure and territorial integrity of many states is expected to influence national security policies. For example, land inundation due to the sea level rising poses risks to the territorial integrity of small island states and states with extensive coastlines.

Climate change, energy security, economic growth

03. Our operational environment

Acting on climate change

Much more needs to be done by the EU, starting now.

Europe is missing a historical opportunity to pursue an ambitious and sustainable longterm climate policy. To date, it has set a very weak energy efficiency indicative (non-binding) target of only 27% by 2030. Europe should

review its position and aim for an ambitious energy efficiency targets by 2030. Our climate is changing at a pace no one could imagine. Mankind in general should think globally. Much more needs to be done at a much faster pace, than previously thought.

Unfortunately, as a global community, when it comes to climate change, we behave as if we had alternative options of solving the current crisis, other places to move to when our planet is made uninhabitable, and time. It's painful to observe how humanity tackles, or better said, ignores, the biggest crisis we have ever faced. Currently, we have none of these three things. What we do have is - urgency, and a huge amount of work to be done.

Europe should go for binding energy efficiency 2030 targets.

Europe is believed to be at the vanguard of the global climate policy. So, the unambitious level of 2030 targets are even less understandable. There is enough economic substantiation and scientific evidence suggest that more energy efficiency would bring great benefits to the society.

> The climate is changing at a pace no one could imagine. Mankind in general should think globally. Much more needs to be done at a much faster pace, than previously thought. Europe should set the pace.

Source: Furima



Eurima, the European Insulation Manufacturers Association, of which URSA is part, struggles to understand the economic, political or social rationale behind such a low-level of ambition on energy efficiency. At a time when Europe is likely on the brink of an acute energy security crisis, economic recovery once again shows signs of stalling and millions of vulnerable consumers are facing an increasing risk of fuel poverty. "It is mind-boggling" said Jan te Bos, Director-General of Eurima, "to see how our leaders have missed a historic opportunity to show leadership, vision and ambition. Instead, they have decided to hide behind short-term national interests and to continue doing business in the past, rather than in the future. Considering the multiple crises we face, this is outrageous".

The best way of securing our energy future is to reduce energy demand

Europe is obliged to import the lion's share of its energy needs. In 2012, EU Member States collectively spent €421bn on energy imports - €1.1bn a day, mostly wasted on inefficient buildings. An amount of less than a quarter of what is spent on energy imports would be sufficient to roll-out a deep energy renovation program in the EU.

The greater part of energy imports comes from countries with political instabilities. This poses a serious risk to EU's energy security. Recent developments in Russia and Ukraine have shifted focus towards the need to reduce the EU's dependency on external suppliers of energy carriers.

A recent paper by Ecofys, a consultancy in energy and climate policy, addresses current European dependence on energy imports and how deep renovation of buildings contributes to reducing such dependence.

At present, the EU's demand for natural gas is the largest in the world, with a consumption of around 4,700 TWh per year and a net import share of around 65%. With oil, import dependency is even higher.

Domestic production of oil and natural gas modestly contributes to the EU oil and gas consumption. In 2011, 76% of all gas and oil (65% of gas, 85%% of oil) was imported from outside of the EU. About one-third of these imports originates from Russia (25% of all imported natural gas, 32% of all imported oil).

Source: Ecofys research – "Deep renovation of buildings: An effective way to decrease Europe's energy import dependency"

'Deep renovation' means a high level of energy efficiency improvement at a rate of 2.3% of the building stock, with a high focus on the efficiency of the building envelope and high use of renewable energy. This policy would lead to a 75% reduction in final energy use by 2050 (compared to 2010). Including cooling5, the present study estimates that the energy demand will be reduced by at least 66%

Deep renovation of Europe's building stock is a sound and sustainable pathway to EU's energy security. An amount of less than a quarter of what is spent on energy imports would be sufficient to roll-out a deep energy renovation program in the EU.

Today's European energy security crisis is a reminder of the scale and nature of what is at stake: a large proportion of our energy imports -as much as 61% of the imported gas- is being used in buildings.

Deep renovation of EU building stock should be a priority.

The present political crisis involving Russia and Ukraine has again highlighted the geopolitical risks of imports and the vulnerability of the EU economy. Focusing on it significant amounts of imports of gas and oil, Europe has been rethinking energy strategy.

Regarding the building sector, more than 1,700 TWh of energy is imported to Europe in total. 31% of all net imported oil and gas is consumed in the building sector (61% of all imported gas and 14%

Ambitious, deep renovation of the building stock would enable the sector to reduce its own imports by 60% by 2030 and 100% by 2050.

> of all imported oil). Russia and Norway account for about 1/4 of the imports each.

A 'deep renovation' policy in the buildings sector could guickly reduce the need for gas and oil, bringing back dependency on imports to zero by 2050. The deep renovation scenario shows a reduction of gas consumption by 95% and of oil consumption by 97%.

It is striking that an amount of less than a guarter of what EU Member States currently spend on energy imports would be sufficient to roll-out a deep renovation program in the EU.

Fuel poverty: An acknowledged problem, tackled wrongly



Fuel poverty is a major social problem in Europe, which requires action across a range of policy issues and at all political levels. Even though there is no common European definition of fuel poverty, it is generally accepted as the condition of being unable to afford to keep one's home adequately heated. Normally, fuel poverty results from a mix of three key factors: low household income, poor heating and insulation and high energy prices.

Research by the Building Performance Institute Europe estimates that between 50 and 125 million people in Europe are fuel poor.

This important social need is addressed by URSA's solutions. Our products help reduce the risk of fuel poverty by lowering energy consumption for heating and cooling and cutting energy bills significantly, while improving health.

The European Commission estimates that energy efficiency in buildings could save €600 per household by 2020.

Between 50 and 125 million people in Europe are fuel poor.

The study published by BPIE found that energy subsidies and direct financial support for household heating cannot provide a long-term solution to the fuel poverty problem. However, deep energy renovation of building stock is a long-term answer to fuel poverty. Case studies of EU countries financing measures against fuel poverty indicate that – even though energy efficiency measures have proven to be the most sustainable solution to the fuel poverty problem – they receive lower funding compared to income and fuel price support schemes.

Unfortunately, there is more. Poor housing conditions can also have a serious negative impact on health and well-being. For example, the health of elderly people, mental disability, respiratory and circulatory problems are adversely affected by fuel poverty. As a result, poor indoor climate causes significant losses for entire economies, as it decreases productivity and burdens public finances due to the requirement for increased medical assistance.

The solution is deep energy renovation of the European building stock and a higher allocation of EU Funds to renovation programmes targeting fuel poor, low-income and vulnerable categories of people.







URSA offers a solution - energy efficiency in buildings and thermal and acoustic comfort.

URSA is entirely dedicated to the production and commercialisation of glass mineral wool (GMW) and extruded polystyrene (XPS) as thermal and acoustic insulation materials for buildings.

_ GMW: Glass Mineral Wool:

The main raw material of GMW is silica sand, one of the most abundant minerals on Earth. To produce GMW we also use a large percentage of recycled glass.

GMW combines a unique set of thermal, acoustic and fire safety benefits. It also has a very positive environmental profile

Life cycle assessment of GMW shows that the energy needed for its production can be saved more than 500 times. Also, due to the inorganic origins of its main raw materials, GMW is naturally non combustible and parasiterepellent, without the need for additives. GMW rolls and panels are compressed, allowing for more efficient transportation, and reducing environmental impact.

_XPS: Extruded Polystyrene:

The main raw material of XPS is polystyrene. XPS offers high levels of thermal resistance, making it a great thermal insulator. It also achieves unparalleled levels of compressive strength and water resistance. This makes it an ideal choice for technically challenging building insulation applications like flat roofs or perimeters.

Our products save energy and provide comfort in all building applications

URSA's strong and consistent brand portfolio more than meets the energy efficiency and acoustic comfort needs of our customers. Our wide portfolio also allows for a balance of different applications and segments.



GMW and XPS are used mainly in residential and commercial buildings to prevent heat transfer and offer acoustic comfort. Our key applications are:

- _ External walls.
- _ Partition walls.
- _ Flat roofs.
- _ Flooring. _ Ceilings.
- Foundations.
- Air conditioning ducts.

URSA PureOne.

Soft, formaldehyde free and durable URSA PureOne is our premium brand and probably the best product on the market. Due to its acryl based technology, it is a durable solution that helps to greatly increase Indoor Air Quality.

URSA GEO.

This high-quality and cost-effective mineral wool has outstanding thermal and acoustic insulation properties. Fire resistant, it's ideal for safe thermal and sound insulation of pitch roofs, partitions, external walls and ceilings.





URSA AIR.

When it comes to energy efficient air conditioning, URSA AIR is the most effective solution. The rigid and high-density panels of URSA AIR are specially designed for selfmounting insulation of air-conditioning shafts and ducts. URSA AIR is quick and easy to install and more flexible than traditional metal ducts.

URSA XPS.

This product is ideal for technically demanding applications such as flat roofs or cellars, being able to resist high pressure loads and where resistance to moisture, water and salty or acidic soils is required.

(Please bear in mind that our products may have different brand names in certain markets.)

The three pillars of sustainability are addressed at product level

Our insulation materials contribute to sustainable development on three levels and most importantly help tackle climate change.

Environment.

- Resource efficiency because less energy is consumed, a smaller transportation infrastructure is necessary and fewer CO₂ emissions are generated. A higher amount of recycled content is used and there is a reduced need for virgin raw materials.
- Thermal insulation in buildings generates substantial energy savings. 1 sq. m. of URSA glass mineral wool can save the equivalent of around 400 litres of oil during its life cycle. The same square metre of glass wool insulation could prevent the emission of 343 kg of CO₂ during its life cycle. (1)



Social benefits. Health, comfort and security.

- _ Thermal insulation makes homes and offices more comfortable, contributing to higher productivity and better public health.
- URSA's glass mineral wool products offer high levels of acoustic comfort as well as security in case of fire. Glass mineral wool and extruded polystyrene also help improve indoor thermal and air quality comfort.
- _ More energy efficient building stock would reduce Europe's dependence on energy imports and provide more energy security.

Economy.

- Deep energy efficiency renovation would generate jobs, economic growth, and save money for governments and individuals. 1 euro invested in insulation = 7 saved!
- For consumers, insulation also saves money.
 Every euro invested in insulation will save
 7 Euros over the product's lifetime as less
 energy is used to reach a higher level
 of comfort.

Energy efficiency of our products: from production to use phase

Saving energy through thermal insulation.

URSA's products help save more than 500 times the energy required in their production. Our portfolio addresses the biggest energy waster of all – buildings – and helps tackle climate change by enabling the more efficient use of energy.

Avoiding CO₂ emissions.

During the lifetime of our products, CO_2 emissions are reduced because less energy is wasted. Savings are 250 times greater than the CO_2 generated during production and transportation.

Efficient use of raw materials and high recycled content use.

The resources used in manufacturing our products are more than outweighed by a building's' use phase, thanks to their unique way of saving energy. A high amount of recycled content is used in producing both GMW and XPS. With GMW, recycled glass is used and damaged products are reused, minimising production waste. To make XPS we use a considerable amount of recycled polystyrene, and recycle products that didn't pass internal quality checks.

Recycled content	2012	2013	2014	
Glass Mineral Wool	39%	38%	49%	



High compressibility.

GMW, a significant part of our offering, is highly compressible, which allows for major benefits in terms of transportation. An unpacked roll can be compressed more than 10 times. So, fewer trucks are necessary to transport more energy saving products and we can store more of our product on a warehouse floor than noncompressible materials.



URSA products are leading in sustainability assessment

It is part of URSA's strategy to promote the use of Life Cycle Assessment and the generation of Environmental Product Declarations (EPD). We believe this is a truly objective way to compare products. Many environmental labels focus on a very limited number of indicators. For this reason we have certified a large number of our products according to respected EPD schemes in different markets. We will continue do so, contributing to transparency in sustainability.

The Ecomaterial Absolute award (Russia).

Ecomaterial Absolute is the highest Ecostandard rank in Russia for environmentally friendly products. URSA has reached the top level of this very demanding certification.

The award is based on a LCA. The certificate specifies that URSA 's glass mineral wool product is highly recommended not only for housing construction and renovation, but also for the construction and renovation of buildings that require the lowest environmental impact such as schools, hospitals and other medical institutions.

European Environmental Product Declaration (norm 15804).

URSA is proud to be the first company to receive a European Environmental Product Declaration TYPE III according to new EN 15804.





Environmental Product Declarations (France).

Fiches de Déclaration Environnementales et Sanitaires (FDES) des Produits de construction is a French scheme generating Environmental Product Declarations. A number of URSA products have been certified and corresponding documents are publicly available at www.inies.fr.

IBU and DAPc (Germany and Spain).

We have also made Environmental Product Declarations according to the German Institut Bauen und Umwelt (IBU) scheme and the Spanish Declaración Ambiental de Productos de Construcción (DAPc), two national schemes that standardise the generation of environmental product declarations.





Rheinau Art Office

-Cologne-

Headquarters of Microsoft Germany. URSA's products were used in this project.

What we have been doing and plan to do

04. URSA's evolution

URSA's production line in Bondeno is reopened after the earthquake

We fall, only to learn to stand up stronger than before. The day of 20th of May 2012 seemed to be the darkest in URSA's recent history. In one day we lost a colleague, had a factory completely collapse, and saw our entire Italian team overwhelmed with fear and uncertainties about the future.

By contrast, the 11th of December 2014 was a bright day. Our XPS factory was re-opened, maintaining our connection to the social and economic fabric of Ferrara, despite the serious crisis and stagnation prevailing in the building industry.

We have received constant support from local and regional authorities, who allowed URSA to make use of City Council premises to install provisional offices, in order to continue administrative support for clients and material providers.

URSA is here to stay. We have rebuilt our factory and now supply our partners with high quality XPS products, while offering green employment once more.

We walk the talk. Our new factory in Bondeno was insulated to the highest standards. We not only produce energy efficiency materials, we do also use them ourselves.

Our factory was rebuilt in record time. The structure is earthquake resistant.

For URSA, this factory represents an example of our employees' high gualification and commitment to the project. Simone Marescotti, the head engineer in charge of the plant, said: "After achieving permission to reconstruct the factory, and obtaining the necessary funds, building works have been carried out as fast as possible".

From the very start of the rebuilding process and all through the plant's reconstruction, we have remembered Tarik Naouch, a dear colleague who lost his life in the devastating earthquake. A plaque in his honour is displayed in the new factory. Reconstruction of the plant has been achieved in record time. The 50,000 square metre facility has a strong earthquake resistant structure, is highly industrialised and also technologically advanced.



URSA's Bondeno team during the XPS production re-opening.



The town of Bondeno's Mayor, Alan Fabbri, and productive activities city councillor, Simone Saletti, seen here with Uralita Group President, Javier Serratosa, and factory manager Simone Marescotti. Company representatives conveyed words of thanks to the Town Council of Bondeno, who, from the very beginning, allowed URSA to make use of City Council premises to install provisional offices in order to continue to offer administrative support to clients and material providers.

Positive outlook as URSA joins the KKR's Green Solutions Platform after acquisition

Uralita Group, URSA's parent company until June 2015, has restructured its debt, handing over its 90% stake in URSA to a New York based investment fund – KKR.



URSA is now a part of Green Solutions Portfolio (GSP), which is KKR's pioneering environmental initiative. The GSP seeks to drive business and environmental value by working with and highlighting the work of participating companies across a wide variety of focus areas. The GSP includes companies focusing on eco-efficiency improvements, advancing eco-innovation, and/or offering a solution to environmental problems as core to their business mandate.

This is good news for URSA. As the company changes ownership structure, new perspectives arise. URSA starts a new page, as relief from debt and reduction of financial costs (interest on the debt) mean more freedom and new opportunities for URSA.

At URSA, we are inspired by the new opportunities and are currently executing the new investment plan. This means modernisation of existing manufacturing lines and active search for new growth platforms, including new production lines, entry into exciting and growing markets and promising applications.

Celebrating 20 years of mineral wool production by URSA in Germany

URSA's mineral wool factory in Delitzsch (Germany) celebrated its 20th anniversary together with many guests, including personalities from politics and business as well as employees who have shown their loyalty and commitment to the company for the last 20 years. Founding members of staff were awarded for their longstanding commitment during the official event.

In his welcoming remarks, Christian Michel, Managing Director of URSA Insulation, stressed the importance of the Delitzsch production facilities for the URSA group. Manuel Geremías Carnero, Managing Director of Operating Unit Central, spoke of economic success, confirmed by 20 years in existence and continuous expansion on site: "20 years are proof of success. This we owe to many factors, such as the good political conditions in the country, well-trained professionals in the region and especially our strong URSA team".



Sven Morlok, Saxony's Minister for Economy, Labor and Traffic underlined the importance of foreign investors to the Free State of Saxony, saying "Production facilities like those of URSA strengthen the competitiveness of the Saxon economy, ensuring growth and prosperity in the state".

Dr. Manfred Wilde highlighted the good relations between URSA and the city of Delitzsch. He drew parallels between the main objective of URSA, supporting energy saving in buildings and the efforts of the Delitzsch community to improve energy efficiency. Delitzsch has received a European Energy Award.



URSA present at Germany's BAU Fair



URSA actively participated at BAU 2015, the Architecture, Materials and Systems Fair which was held in Munich (Germany), between the 19th and 24th of January. We had a 115 square metre stand, where our new corporate image, and innovative products and solutions – developed to achieve sustainability and energy efficiency in the buildings where were they are installed – were introduced.

According to Natalya Otten, Marketing Director at URSA Germany, "URSA took part in BAU 2015 to satisfy the increasing demands of our customers looking for personalised custom solutions and systems tailored to their needs".

In addition to our products, URSA presented a brief history of our main landmarks and prizes in the last seven years. We introduced our most pioneering materials, like the new ASP 32 PLUS, a new mineral wool panel, ideal for thermal or acoustic insulation of the pitched roof above the rafters. One of the biggest attractions of the stand was the URSA Blackbox, a photography studio where visitors could receive their own snapshot and leave messages for the company, which were screened during the Fair. For Otten, the exhibition was a real success as shown by the increasing number of visitors to the stand this year and the high level of professional contacts made during the six days.

BAU 2015 introduced new materials and architecture systems for housing industrial building, as well as dwellings and interiors. The product range exhibited was classified into construction materials and in product areas, paying special attention to sustainable building. More than 1900 exhibitors from 43 countries participated, throughout the 17 pavilions of the Messe München.

URSA shows its Sustainable Insulation Solutions at BATIMAT Trade Fair

URSA engages with partners to develop insulation solutions that can be applied to create more energy – efficient buildings.

At BATIMAT, we took the opportunity to show our insulation solutions to visitors, highlighting our range of mineral wool and extruded polystyrene, and presenting the latest additions. BATIMAT was a great success for us, with more than 1900 visitors and over 1800 URSA Guides distributed in five days.

BATIMAT provides a powerful boost for the spread of new products through the building market and a real springboard for manufacturers who are launching innovations. This is the main reason that 96% of the exhibitors give for taking part.





World Sustainable Building Conference 2014 in Barcelona: URSA's active role

URSA's profile at the World Sustainable Building Conference, World SB14 in Barcelona, which took place from the 28th to the 30th October was high. As a Platinum Sponsor, the company was fully involved in preparations for this important global gathering which united the leading stakeholders in sustainable building.

World SB14 Barcelona was organised by GBCe and promoted by CIB (Conseil International de Batîment), iiSBE (International Initiative for a Sustainable Built Environment), UNEP-SBCI (Sustainable Buildings and Climate Initiative) and FIDIC (International Federation of Consulting Engineers), and counted on the collaboration of WGBC (World Green Building Council). The Sustainable Building Conference Series, of which World SB14 Barcelona was part, is the largest global meeting aimed at debating different aspects of sustainable building. "As manufacturers, our commitment has been to support this Conference from the very beginning, Efrén del Pino said, adding "We understand that it can be a key starting point to make things change within the building sector and sets the basis to develop roadmaps and action plans within the sector in different markets around the world. The Conference gathers together the main stakeholders that work for sustainability in building. URSA wanted to be by their side."



Customers choose - URSA receives, for the second time, the "Trophée de la Maison"

The prize is given by the most objective jury: 20 French consumers who try several products in their own homes and in actual conditions before issuing their final verdict. We're delighted to announce that PureOne by URSA has achieved the "Trophée de la Maison" 2014–2015 owing to its excellent insulating properties.

This important French prize, awarded since 1997, is given by a completely independent association, unconnected to any mass media representatives, distribution chain or professional organisation. Every year, to select the winners in each category, more than 30,000 real tests are carried out, making the "Maison" the primary quality control centre in France.

PureOne by URSA is a white, top performing mineral wool with a high fire resistance rating that contributes to improving buildings' interior air quality. It is a material of natural origin, 100% recyclable which offers important thermal and acoustic improvements.

Consumers also valued the material's soft and smooth touch and its easy handling and installation, both in rolls and panels.



URSA AIR wins the innovation ISO award 2014



On Wednesday 7th May 2014 URSA AIR was voted most innovative and unique product by the jury of the ISO – International Trade Fair for Industrial Insulation Materials and Technology. The jury picked URSA AIR from among numerous candidates as the most innovative product –the winner of the ISO AWARD. Key elements underlining this decision were the product's uniqueness, innovative within the field of application, its cost efficiency and the way handling and installation conditions have been improved.

The ISO AWARD, one of Europe's most important innovation prizes, was awarded to URSA AIR because of its combination of distinctive system innovations in the area of thermal insulation, air-conditioning, noise reduction and its fire protection properties during the ISO International Trade Fair for Industrial Insulation Materials and Technology. The URSA AIR Team, consisting of technical and product specialists and marketing experts from URSA, received the ISO AWARD on Wednesday the 7th of May 2014 during the official reception prior to the opening of the ISO trade fair in Cologne, Germany.

Available since 2013, URSA AIR is now conquering the German market. Some flagship buildings in Germany have already been equipped with URSA AIR air-conditioning and ventilation ducts. With its numerous advantages, URSA AIR outperforms traditional applications using sheet metal ducts and separate insulation. URSA AIR facilitates a new way of manufacturing insulated airconditioning and ventilation ducts. For planners, installers, builders and investors the ducts offer many advantages in terms of flexibility, energy and cost efficiency. URSA AIR is a first choice product that secures both good health and wellbeing in buildings.

URSA is awarded as the "Supplier of the year 2013" by EURO-MAT Group

URSA was awarded the "SUPPLIER OF THE YEAR 2013" in the category "building materials" for our commitment to commercial excellence, especially for impressive business evolution by key members and excellent communication.

This prestigious award was granted during the VIII Forum of EURO-MAT Suppliers, held in Palma de Mallorca, Spain, from 17th to 19th April 2014.

The EURO-MAT Suppliers' Forum received a very positive response from all the attendees. During the international benchmarking platform, more than 130 participants from industry and trade had professional and high-quality meetings that could deepen existing contacts and establish new opportunities for their respective businesses.





Mr. Lucien Hardt, General Manager of EURO-MAT, had the pleasure to give the award to URSA on behalf of all the EURO-MAT members. URSA was represented by Mr. Christian Michel, CEO URSA insulation S.A. and Mr. Pascal Moret, Managing Director URSA OU Central. "It is a great honor for URSA to receive this award," Pascal said. "I want to thank all our partners at EURO-MAT for selecting URSA as supplier of the year 2013. Thanks to you we managed to strengthen and to develop our market position as one of the leading insulation suppliers. The award is a recognition of our strong performance and at the same time an appreciation of the engagement of each employee at URSA."

URSA's products in action

Bolshoi Theatre in Moscow.

The famous Bolshoi Theatre in Moscow reopened its doors after several years of restoration. Major renovation works, which cost over 21,000 million roubles - around 500 million euro -, have returned the Theatre's appearance to what it was in 1856.

One of the main goals of the repairs was to improve the Theatre's acoustics, attempting to bring the sound quality back to the standards that made it the best in the world. To achieve this, the design team trusted URSA, selected among manufacturers from all around the world to fit the Bolshoi's insulation.

The Theatre's original acoustics had been completely changed by the last Soviet renovation works, where reinforced concrete was used. To recover the excellent sound quality, as well as stripping the entire space from any traces of concrete, URSA's PureOne was used: a white top performing mineral wool, with a high fireresistance rating and which contributes to improve, notably, the interior air quality. It is a material of natural origin, 100% recyclable, which offers important advantages in thermal and acoustic insulation, helping to improve buildings' sustainability. On top of this insulation, wooden panels – made out of the "resonance fir tree" – were placed, identical to the original ones used in 1825 that made the Theatre's sound quality unique.

As well as restoring the main concert hall, the Bolshoi duplicated its size. An underground concert hall was built, 20.5 metres deep and with the capacity to hold 330 spectators. Owing to its proximity to the city's metro train line, this space, called the Beethoven hall, had to be especially insulated to protect it from train vibrations.

During the 6 years of renovation works, more than 3000 people participated in the project.





Energy efficient family house by Joaquín Torres.

Joaquín Torres, known as the "architect of the stars", is one of the most popular representatives of contemporary Spanish architecture. Cofounder of ACero Arquitectos, together with Rafael Llamazares and Alberto Peris, the architect is the author of this modern single-family home, belonging to a famous football player and located in the sea-side town of Gavà.

To achieve the best insulation for the ventilated façade and interior living spaces, the architect prescribed the use of URSA's TERRA range of materials.





Each URSA TERRA Vento panel is finished with an outer veil that protects the inside layer of mineral wool from weather conditions during construction of the ventilated façade. In addition, panels are covered by another black thin veil which repels water.

URSA TERRA was also the material chosen for the interiors of the building. These panels comply with all the thermal insulation requirements of the Spanish Technical Building Code. URSA TERRA offers a high fire class (A1), also increasing acoustic insulation and comfort in buildings.



Despite its retractable roof, the stadium is an open structure with a similar temperature inside and outside its walls; hence its constructors and architects trusted URSA for the insulation

National Stadium in Warsaw.

Red and silver are the colours of the team that plays its matches here, the National Team of Poland. The National Stadium in Warsaw (Narodowy Stadion, in Polish) is one of the most modern football pitches in Europe. It is also the largest football stadium in Poland, with seating for more than 58,000 spectators, in a country where – as in many countries across Europe– football is a religion.

One of its peculiarities is the retractable PVC roof, which unfolds from a spine suspended in the centre of the playing field and was inspired by the system at the Commerzbank-Arena in Frankfurt (Germany). The retractable roof structure is 240 metres by 270 metres large, with the central spire located at a height of 124 metres, over the Vistula river and 100 metres above the playing field.

This is a multi-purpose space: in addition to football matches, the complex is equipped to host other sporting events, concerts, cultural events and conferences. It has the largest conference facilities in Warsaw, capable of holding up to 1,600 people.

The construction of the national stadium was carried out by a German-Austrian-Polish consortium led by the Alpine Bau group. Both the construction multinational and the team of architects – formed by JSK Architects, SL, GMPvon Gerkan, Marg und Partner Architekten and SBP-Schleich Bergermann und Partner – trusted URSA for the insulation of this great complex.

URSA AKP3 / V, a mineral glass wool insulation material presented in panels and reinforced with a black glass mesh fabric on one of its sides played a key role in this project In addition to a low thermal conductivity, this insulating material offers exceptional sound absorption and a high fire resistance rating (class A1).

URSA TWP Silentio was also used in the insulation of this stadium. A perfect choice for this venue, the material has a great capacity for sound absorption, is non-combustible and has a great resistance to weight loads.





URSA XPS used in Airport Leipzig/Halle.

In March 1986, two Concordes from the airlines Air France and British Airways landed at Leipzig/ Halle (Germany), filled with passengers coming to the Leipzig Fair. This airport, also known as Schkeuditz Airport, is located between the cities of Leipzig (Saxony) and Halle (Saxony-Anhalt) and has traffic of almost two million passengers per year. It is, in addition, the headquarters of the operator DHL Aviation, which has meant a large increase in cargo traffic.

Leipzig/Halle airport was modernised when the city was nominated as a candidate to host the Olympic Games of 2012, which were finally awarded to London. All infrastructures were improved, parking, check-in facilities, the two runways and the loading docks. Furthermore, two rooms were built to accommodate the new snow ploughs, whose function is to keep the airport free of snow and ice in winter. To support the weight and pressure of these large machines, the ground of these buildings had to be reinforced; leading project team leaders to chose URSA XPS D N-III-L, installing it under the paving and combined with floor heating.

These extruded polystyrene panels offer great resistance and durability. Their use under foundation slabs has received the approval of the Passivhaus standard, widely used in Germany.

URSA XPS D N-III-L panels have very low thermal conductivity, a high resistance to compression and an extremely low water absorption capacity owing to their non-porous, closed cell structure. In addition to its use under flooring, this material can be used as external insulation of roofs and terraces, as well as being suitable for the insulation of interior partition walls and ceilings.

The ground of the buildings built to accommodate the new snow ploughs that keep the Leipzig's airport free of snow and ice in winter, were reinforced with URSA XPS D N-III-L





Energy efficiency at its best: LifeCycle Tower One



The tallest wooden building in the world, 8 storeys high and located in Dornbin, Austria is an office tower designed by CREE (Creative Renewable Energy and Efficiency) that incorporates the latest solutions in energy efficiency and sustainability.

The building uses wood as the primary structural support and is designed in accordance with the Passivhaus standard. Another of its key features is that it incorporates prefabricated building modules, which have halved traditional construction time.

The glass and concrete façade is designed to minimise thermal bridges. It integrates a photovoltaic construction system (BIPV), solar panels and a double glass curtain. In addition, facilities such as an efficient biomass boiler and passive cooling – thanks to the opening of the building's windows – have also been included. All these innovative ideas were incorporated by the architect Rhomberg Bau, who developed the project, along with an interdisciplinary research team (architecture, construction, building, and static physics), within the framework of the programme "Factory of Tomorrow". The authors of this project can boast of having achieved a outstandingly efficient building with a very satisfactory emissions balance regarding the materials used.

The 2,500 square metres used for offices are protected by a roof isolated with URSA PureOne SF 32, 16 cm thick. This material is ideal for the insulation of wood structures, roofs, interior partition walls and ceilings.

URSA's strategy



Three pillars underpin URSA's vision for the future.

- **______ First is a strong focus on innovative product development.** There is a clear understanding that we create value for our customers offering such innovative solutions as URSA PureOne, the first white mineral wool on the European markets. We continue to develop high performing products that combine greater thicknesses and better thermal conductivity levels, system solutions, accessories and tools.
- Second is a continuous effort to achieve stricter energy efficiency legislation at the EU level. We will continue, along with our industry partners, to push for stronger European energy efficiency legislation and more rigorous implementation on national level, as this is a must to address such issues as climate change and energy security.
- **Last but not least is our team.** We focus on encouraging talent, increasing knowledge and retaining expertise to maintain a strong, committed team.





Environmental indicators.

We do our best to make products as sustainably as possible and operate as an environmentally responsible company.

- A. Increasing recycled content. We use a high amount of recycled content in the production process for both GMW (recycled glass) and XPS (recycled polystyrene). We aim to continue reducing the amount of virgin raw materials we use even more.
- **B.** Efficient use of water. Water for production is used in a closed cycle, efficiently and with a minimum intake of fresh water.
- **C.** Efficient use of natural resources. We constantly improve our products through the more efficient use of natural resources.
- **D.** Better compression and more efficient use of packaging. We have increased the quantity of product in the same packaging, causing less environmental impact, including from transportation. Our products can be compressed up to eight times.

	2010	2011	2012	2013	2014
	100%	103%	122%	124%	154%
	212	217	218	189	188
	954	989	981	928	889
0%)	100%	100%	95%	96%	93%
10=100%)	100%	99%	95%	88%	89%

URSA's team: The basis of our activity

Much has to be done over the next decades to make sure we and generations to come have a positive future. Our team is ready for the challenge.

URSA's team is spread over Europe, Russia, Asia and Africa. We are happy to be multinational and crosscultural, the result of not just different countries but also cultures. Together, URSA's people make up a mosaic of the modern world.

- **_ Development opportunities.** Through training programmes, growth possibilities and the delegation of responsibilities, we generate new development possibilities for our management and workers. In 2014 more than 95% of our employees were assessed and advised according to their personal development plans.
- **Internal promotions.** URSA continues to favour internal promotions. We have a clear strategy and many years of experience promoting people from within the organisation. In 2012, around 3% of URSA staff were promoted internally.

URSA's workforce by **nationality**.



URSA's total workforce split by region.







URSA's total workforce split by age.

Health and Safety programme yields results

We continue to learn and improve our track record in Health and Safety. We operate a large number of factories across different countries: Russia, Poland, Slovenia, Germany, France, Belgium and Spain. For us, it is essential that our team members are as safe as possible. To prevent risks at work while achieving our high level of safety, we have different policies in place and a strong track record.

- **1.** Since 2006, health and safety goals have been set up and closely tracked at top management level.
- **2.** Every year a new safety programme is implemented at division level:

2009 - URSA Safety Standards.

- **2010** Top Five, a programme that implements and closely follows up the top five actions in different areas of health and safety.
- 2011 Health & Safety Radar.
- 2012 Global Safety Action Plan.
- 2013 Safety Program for supervisors.
- 2013 1st wave of our Plant: Standardisation programme. Management of accidents. Safety visualisation. Safety training given by supervisors.

2014 – Risk mapping programme.



- **3.** Since 2005, the number of accidents has been reduced by an impressive 80%.
- **4.** Hours lost due to accidents were reduced by 76% as compared to the 2005 levels.
- **5.** During 2010 and 2011, 9 of 14 plants received URSA 500 and URSA 1000 awards for maintaining a zero level of accidents for 500/1000 consecutive days.
- **6.** In 2014 our Dabrowa factory (Poland) reached 1500 days without accidents.
- Recently, URSA's Serpukhov XPS factory has reached a milestone of 1,000,000 hours without accidents. But our goal is not to dwell on what has been achieved. We strive for more.

Every year we implement a new Health and Safety programme.

Health and Safety: Indicators



Lost Days Rate.



Injury Rate.



Sickness absenteeism.

Absentee Rate.



Total absenteeism.



Injuries.



	2006	2007	2008	2009	2010	2011	2012	2013	2014
Absentee Rate	952	608	418	270	452	218	291	293	302
Lost Days Rate	119	76	52	34	56	27	36	37	38
Injury Rate	6,9	4,8	2,8	2,7	2,5	1,8	2,0	1,7	1,8
Occupational Disease Rate	0	0	0	0	0	0	0	0	0

Summary of the Health and Safety indicators.



We have managed to bring down the number of accidents by 80%, as compared to 2005 levels.

URSA future plans and sustainability commitments

Our view of the future hasn't changed. Europe wastes more energy on buildings than anything else and this needs to stop.



Insulated façade.

Deep energy renovation of European building stock is a must. We need more ambitious and binding targets on energy efficiency till 2030. Our overarching objective must be a Nearly Zero Energy Building stock by 2050. That would mean much more deep energy renovation.

URSA is on the front line, offering what works best – insulation – for the sector that needs it most: buildings. Energy demand in buildings must be reduced by 80-95% by 2050 and insulation offers the best way to do this. New buildings must have almost zero energy levels.

We are also working hard to make sure that we operate as sustainably as possible. For this reason, URSA is committed to paying special attention to, and improving, our performance:

- Health and safety we aim to reduce the number of accidents to zero by 2020. A strict follow-up, and strong health and safety measures are implemented each year for this reason.
- **Energy efficiency** over the next years (2016-2017), we plan to reduce the energy intensity of our production by a further 2%, as compared to 2010.





URSA's Novo Mesto Plant -Slovenia-

URSA Glass Mineral Wool plant.

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