

The right direction

Simple steps to sustainable steel construction





Sustainable development of the iron planet

Nothing could be more natural or sustainable than to build our world with steel. Iron, the basic raw material, is the most abundant element on Earth. A compass points north because the iron content of the planet gives it polarity like a magnet. This inexhaustible natural resource becomes truly infinite as steel can be recycled indefinitely without loss of property or performance.

No surprise then that steel has become the most vital, hence widely used, of the materials that sustain our way of life. It is impossible to imagine our civilisation without it. Even non-steel products and other materials depend upon steel for their manufacture – very little that we find useful in today's world could be made without using steel and steel products.

Steel is the most sustainable of construction materials, not just because it can all be recycled or re-used again and again without ever degrading its quality, but also because major advantages flow from the decision to select steel as a solution, advantages that add up to significant benefits to the users of steel and society as a whole.

Sustainability is built into steel all along the supply chain, from an environmentally responsible approach to the sourcing of materials, through manufacturing processes that have a continuous improvement culture built-in, to the production of steel construction products that are modern and efficient.

Steel-framed buildings offer maximum flexibility to architects to express their design vision, allow easy adaptation to meet changing uses, can be cost effectively extended - even upwards - after being built, and are easily dismantled to allow future development on the same sites.

Steel is the socially, economically and environmentally responsible and natural choice for a century that must put sustainability first.

Sustainability triple bottom line

- ✓ **Economic** If it's not made of steel, it's made using steel
- ✓ **Social** Steel is fundamental to everyday life
- ✓ **Environmental** Iron is the most abundant element on the planet

Longer lasting design appeal

Judged by either internal or external appearance steel-framed buildings, incorporating steel based cladding systems or tubular steel architectural features, strike a modern note. A steel-framed building maintains its modern appearance and appeal for longer. Steel doesn't age or decay as quickly as other construction materials, so steel buildings have a longer life before needing to be refurbished.

Steel buildings are aesthetically pleasing, easily and cost effectively incorporating the architectural features that set good design apart, and retain their modern feel for many years. Users of steel-framed buildings appreciate the pleasant work environments and the light and airy spaces that can be provided. Steel buildings can be easily adapted, and changing cladding systems can ensure that they remain modern looking throughout their extended lives.

Efficiency in design, taking advantage of the high strength-to-weight ratio of steel, means foundations are lighter than might otherwise be the case, and flexible internal column free spaces much larger.



Steel car parks provide column free, light and airy spaces, safe and secure environments that are particularly appreciated by shoppers and other car park users.

Steel designs are economic, minimising material use and allowing flexibility and adaptability in the future use of buildings.

Architects increasingly value the freedom that steel allows their creative vision, as many designs can only be achieved in steel. Modern building often takes place in congested and restricted inner city sites where replacements can only physically be built by using steel.

Service integration within the structural depth of steel frames reduces cladding costs and heat loss through building envelopes, and also means that additional floors can be provided within buildings with no increase in overall height.

Designers in steel can accommodate the growing desire for structures that can be easily dismantled and relocated, as is evident in designs for some London Olympics structures. Steel designs also allow for the integration of future changes in technology.

Responsible design includes consideration of eventual demolition. Steel piles are easily removed whereas redundant concrete piles leave a legacy problem that threatens to blight some redevelopment sites.

Sustainability triple bottom line

Economic

Lighter structures require less material and foundations

Social

People prefer to live and work in a modern attractive built environment

Environmental

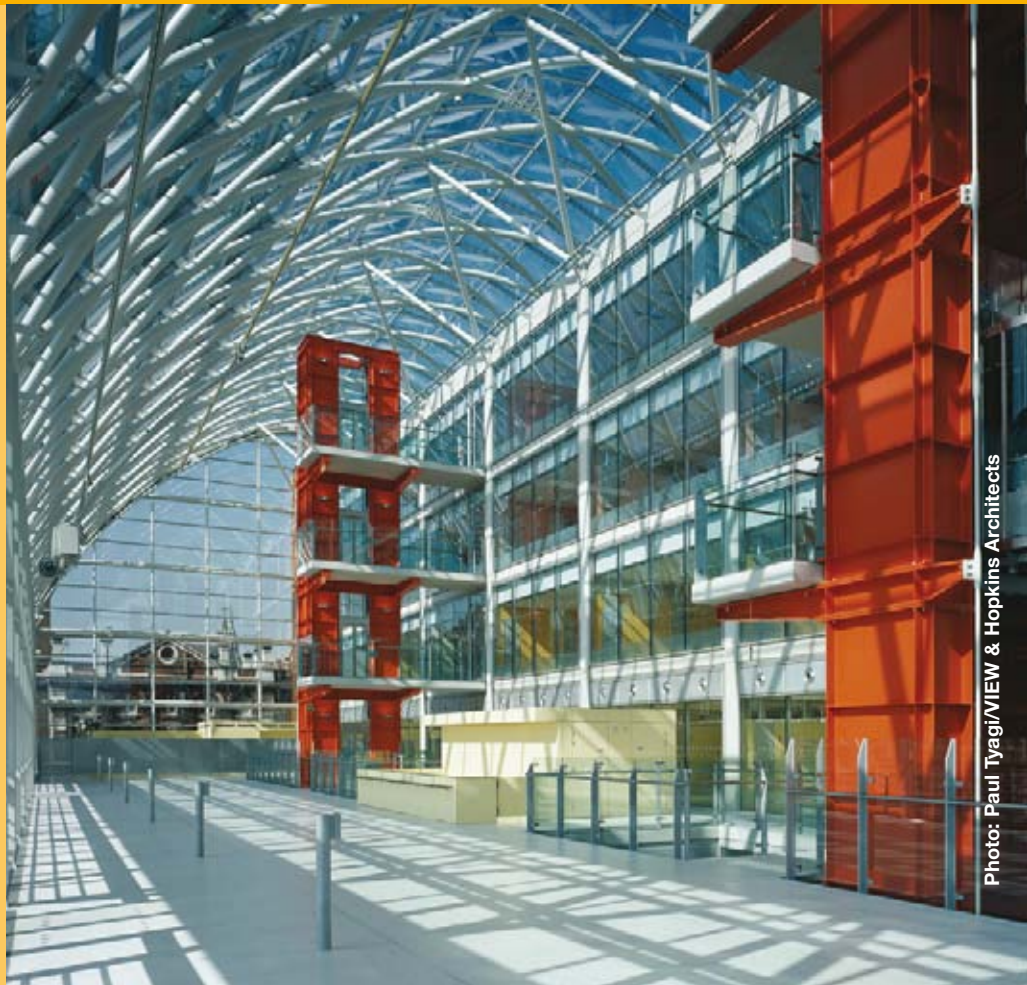
Steel retains its appeal longer, extending a building's useful life

Case Study: Hospital with 'Wow' factor

Light and open airy spaces typify modern steel buildings as architects take advantage of the potential of steel as a construction material.

Modern hospitals in particular benefit from the aesthetic superiority of steel. Making hospitals less daunting places for children is a challenge for architects, and steel came into its own when a brief to create a child friendly hospital in London, with a 'wow' factor, was undertaken - the Evelina Children's Hospital, is part of St Thomas' Hospital on the South Bank.

Hopkins Architects and structural engineer Buro Happold did just that with an award winning building. The hub is a striking four storey atrium running the length of the building, covered by a fully glazed, curved steel-framed roof 20m high and 18m wide made from circular hollow tubular steel.



Recycling steel – the never ending process

An unrivalled sustainability strength of steel is its ability to be repeatedly re-used or recycled without any degradation in the quality of the material. Other materials are often recycled only once before downgrading which means that they eventually find their way to landfill.

Steel never loses its value and it enjoys a sustainable economic life cycle that is unrivalled by any other construction material. All used steel has a value, whether it is being re-used or recycled.

Steel is unique among construction materials in the amount that is recycled and re-used. Current recovery rates in the UK are 99 per cent for structural steelwork and 94 per cent for all steel construction products. These values will only improve.

Globally, recycled material comprises 40 per cent of steel manufacture. Almost 500 million tonnes of steel is recycled each year, the equivalent of 180 Eiffel Towers every day.

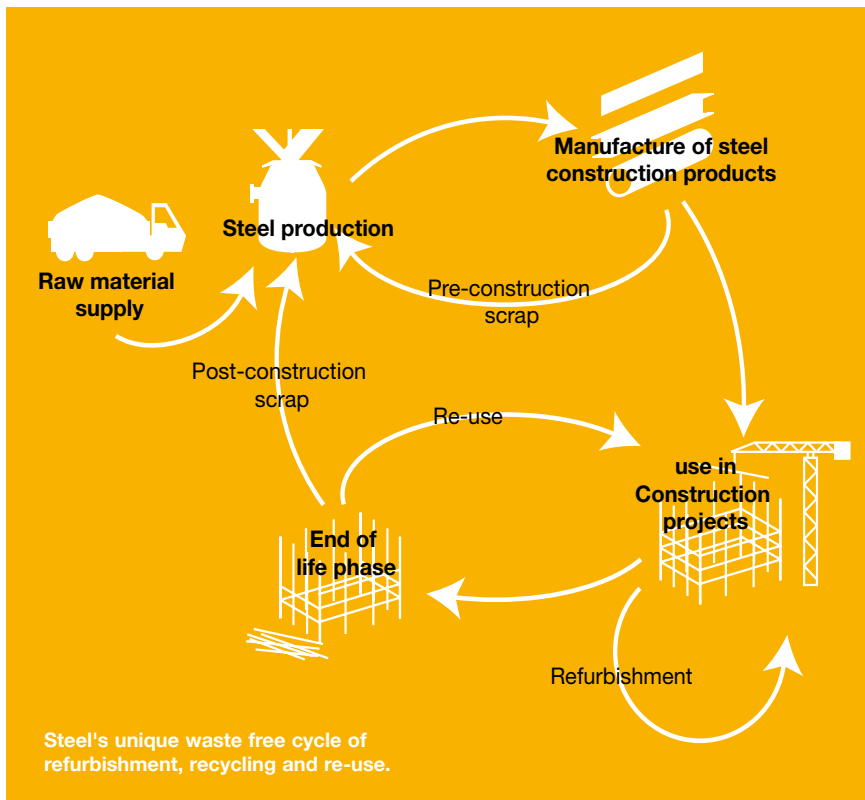
This outstanding recycling performance was achieved before sustainability became an issue. There was never any need to legislate for it as steel has an intrinsic value as a scrap material and is always in demand for the production of new steel.

There is no degradation in the material when steel is recycled – it is of the highest quality when it first comes out of a steelworks and maintains that quality always. The component nature of steel frames means that their re-use is straightforward. Steel piles are easily extracted and can be re-used or recycled – piles extracted from a development in London recently were found to be in good condition after 100 years in the ground.



Sustainability triple bottom line

- ✓ **Economic** Steel's inherent value underpins the continuous cycle of recovery and re-use
- ✓ **Social** Recycling of steel crosses sector boundaries and touches every aspect of peoples lives
- ✓ **Environmental** Recycling saves the planet's resources and reduces energy inputs



Recycled content

All new steel is made with a significant recycled content. The modern steelmaking process requires it and it is not possible to produce steel without it. The average recycled content of structural steel used in the UK is 60 per cent.

Recycled content is an appropriate driver to encourage recycling of materials which would otherwise be used just once. However, steel is already recycled close to its maximum, so specifying recycled content does not result in any improvement - but it can add significantly to project cost.

The world's stock of steel in use always has a positive value because scrap steel is in demand - it can be regarded as one of the planet's most sustainable stores of value as it will always be needed.

From ashes to Ashes

What is the connection between a two pence coin, a Ford Transit van, London Heathrow's Terminal 5 and the Oval cricket ground? Recycled steel is the answer.

Recycled steel turns up virtually everywhere. When Corus demolished a redundant plant on Teesside, the 20,000 tonnes of recovered steel were tracked through the recycling process to its new uses.

Structural sections went to Heathrow Terminal 5 and the new stand at the Oval.

Some was used in the manufacture of steel plate for the construction of buildings over Paddington Railway station in London. More plate was fabricated into large girders used on the construction of the A249 bridge to the Isle of Sheppey in Kent.

And some was even used in the manufacture of galvanised strip steel to make light steel-framed houses, copper plated one penny and two pence coins and automotive parts.

Recycling this steel saved enough energy to supply 3,700 households with all of their energy requirements for a year.

Steel is a store of value, too precious to waste

Virtually no steel is sent to landfill as waste. Steel has a value at all stages of the process, whether it is in use as a construction product, or being re-used or recycled.

Almost no waste is generated during the manufacture of steel components, and all of this is recovered and recycled. On construction sites, which generate large volumes of waste, it is thanks to off-site fabrication that no steel is wasted, as only what is needed ever comes to site.

When steel is fabricated for construction uses and brought to site for erection, there is virtually no waste at all. Any waste generated in the fabrication shop is recovered for re-use or recycling.

Optimising the use of natural resources is a key goal for Corus as part of our Corporate Responsibility policy. This governs everything that Corus does and targets have been adopted covering health and safety, environmental, social and ethical issues.

All of these areas are covered by established management systems and the company reports on performance against the targets each year. As a result, Corus has highly visible strategies aimed at ensuring that waste is minimised throughout its supply chain.

Little waste arises in the iron and steel making processes. Iron and steel making generates co-products that are valued for use as raw materials by the construction industry. For example, blast furnace slag produced during the production of iron, is used as roadstone. It can also be ground down for use as a cement replacement.

The manufacturing process generates gases that are recycled within our steelworks. The majority of the gases are re-used at our on-site power stations which provide 40 per cent of the total electricity used.



Ground granulated blast furnace slag – a high value co-product of iron making helps to reduce the high carbon footprint of concrete.

Sustainability triple bottom line

- Economic**
Creating waste costs money and landfill taxes are high
- Social**
Less material taken to site and removed to tip means fewer transport movements and reduced disruption
- Environmental**
Burying or burning waste causes ecological harm

Corus Bi-Steel: Corefast core under construction. Waste minimisation is one of the advantages of off-site construction and Corefast from Bi-Steel is a great example. Corefast is of particular benefit where speed of construction is paramount and is up to six times faster to construct than an equivalent concrete core.



The socially responsible material choice

As a responsible supplier Corus is committed to fulfilling the duty of care that is owed to the environment, our suppliers and customers, our workforce and the communities in which we operate.

Sustainability involves more than meeting environmental targets. A balance between the social and economic, as well as the environmental aspects of our activities must be achieved.

Corus is highly proactive in ensuring that sustainable practices are adopted along our supply chain, starting from ensuring responsible sourcing and transportation of raw materials. Corus is committed to using rail freight rather than road for delivery of products wherever possible.

Targets have been adopted to reduce the environmental impact, and these are reported on annually. Corus has a continuous environmental improvement strategy in which compliance with permissible emission limits is regarded as a minimum performance target.

All Corus manufacturing sites are certified to ISO 14001, which is the international standard for environmental management systems.

A corporately responsible approach is taken to the welfare of workforces in the steel construction sector. By manufacturing building frames off site in factory controlled conditions, rather than on construction sites, a valuable contribution is made to the stability of family and community life as operatives return home safely at the end of the working day. Stability of employment in the steel sector contrasts with the itinerant, casually employed status of much of the construction workforce.

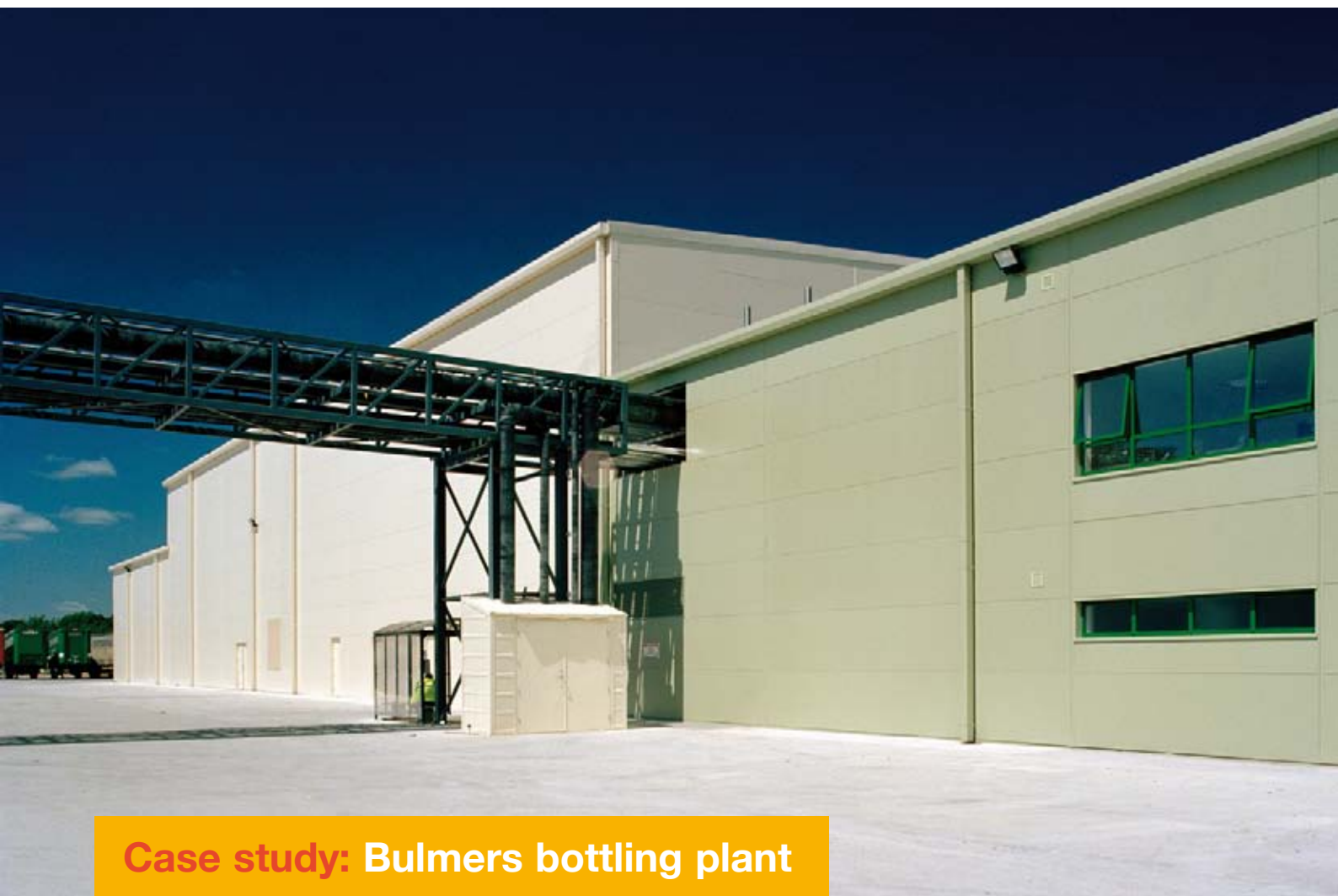
Corus is committed to improving all aspects of its environmental performance through the adoption of sustainable practices and continuous

improvement. Along with our partners in the steel supply chain we provide technical help, up to date design guidance and other research based back-up to promote sustainable design.

Another aspect of being a responsible business partner is ensuring that adequate investment is made to ensure the continuing uninterrupted supply of steel to our customers. Corus has made substantial investments in steelworks in recent years to ensure this, including a new world-class Automated Distribution Centre at Scunthorpe, which receives sections from the adjacent mill and stacks and retrieves them as required while sheltered from the elements. The ADC improves customer service by ensuring that products are despatched on time and reach customers in first class condition.



Shotton railhead, Deeside - home to Corus Colors, specialising in the production of galvanised, painted and pre-finished steel for building envelopes. The railhead opened in 2005 and transports some 14,000 tonnes of steel between South Wales and Deeside every week. Its operation has taken 50,000 tonnes of road transport off the road each year - a total of 2,500 journeys and 400,000 road miles.



Case study: Bulmers bottling plant

The world's first CarbonNeutral building envelope solution – Confidex Sustain® – has been launched by Corus and is providing a perfect fit with the environmental ethos of early satisfied users.

Confidex Sustain® is the world's first cradle to cradle CarbonNeutral building envelope and received its first use in Co. Tipperary, Ireland, by cider maker Bulmers, part of the C&C Group plc, at the £50 million expansion of its plant at Annerville in Clonmel.

Bulmers' new bottling halls, with a capacity of 50,000 bottles an hour, were designed and built to Confidex Sustain® registration standards, which means they are CarbonNeutral and that virtually all components used are traceable, from manufacture to end of use.

Corus Confidex Sustain® goes beyond mere compliance on environmental issues. Corus is taking action to reduce to net zero the unavoidable CO₂ emissions produced by Colorcoat HPS200® and Colorcoat Prisma® pre-finished steel products and the Colorcoat® assessed cladding systems they become a part of.

For every 1kg of CO₂ emitted by the pre-finished steel, cladding, fixing and insulation of a Confidex Sustain® building Corus offsets 1kg in renewable energy and energy efficient projects throughout the world in conjunction with the CarbonNeutral Company. These projects will have social as well as environmental benefits for local communities, usually in undeveloped countries

Bulmers bottling facility uses Corus Colorcoat HPS200® pre-finished steel.

Sustainability triple bottom line

- Economic**
Sound financial management and investment to secure the future of the business
- Social**
Stable employment leads to improved social fabric
- Environmental**
Corus has a proven track record of reduction in energy use, emissions and transport movements

Steel buildings minimise energy use

Corus is committed to reducing the energy needed for the manufacture, transport and construction of buildings, but operational energy is more important by a factor of about ten.

Operational energy is the energy expended by a building in use during its lifetime, and on this criteria steel buildings represent the sustainable choice.

Steel is mounting a three-pronged effort to help the global challenge to minimise energy use. Great progress is being made to reduce the amount of energy used in manufacturing, construction of buildings and their operation. One obvious way in which using steel in construction reduces energy consumption is because of the much reduced amount of construction

traffic that has to visit the site of a steel-framed building – 70 per cent less according to estimates – hence less vehicle fuel is used.

Progress towards reducing the environmental impact of steel manufacture has been underway for many years. An 11 per cent improvement since 2000 has contributed to an overall 50 per cent reduction in the energy needed to produce one tonne of steel over the last 40 years. Corus recognises that the industry is still a significant contributor to global CO₂ emissions and is playing an active

role in helping combat climate change, by minimising the carbon emissions from manufacturing processes, through participation in international steel industry efforts and by continuous investment in new and improved equipment and processes.

Corus is developing new products and services to help reduce the environmental impact over the product lifecycle, such as solar panel structures for carbon neutral housing, and advanced high strength steels to decrease fuel consumption.

Sustainability triple bottom line

Economic

Reduced energy consumption reduces operational costs

Social

Modern thermally efficient buildings provide a pleasant environment for work, rest and play

Environmental

Optimum thermal mass is available from the floor slab of a standard steel-framed building without the extra environmental burden of a heavyweight structure and large foundations

Thermally efficient steel buildings

A steel-framed or clad building is a thermally efficient structure. Steel cladding systems produce building envelopes with high levels of thermal efficiency. Twin skin and composite systems are produced by a range of specialist manufacturers, which are durable as well as achieving levels of thermal insulation and air tightness that can easily meet building regulations.

Measures of energy use in buildings distinguish between embodied and operational energy; the former is the energy needed to manufacture and transport the materials and to construct a building. Operational energy is the energy expended during a building's working life, and is generally accepted to heavily outweigh the embodied energy. Steel

Construction Institute estimates suggest embodied energy is outweighed by operational energy by a factor of 1:10 in an air conditioned office building over a 60 year design life, but efforts have to be made to reduce both.

It may seem counter-intuitive, but in typical modern commercial buildings the energy consumed for cooling is generally greater than for heating. Providing adequate cooling to achieve optimal working conditions while minimising energy use is the challenge for designers. Fabric energy storage, sometimes called thermal mass, can be used to absorb excess heat during the day, which is then removed by nighttime ventilation or purging. Mechanical cooling can be reduced or eliminated.

ULCOS

Corus has a continuous programme of investments designed to improve the energy efficiency of its processes and is a major partner in the ULCOS (ultra-low CO₂ steelmaking) project, which has a target of a 50 per cent reduction in emissions per tonne of steel by 2050.

Corus promotes research into a range of potential breakthrough technologies aimed at reducing CO₂ emissions such as recycling blast furnace gas, CO₂ capture and sequestration, electrolysis, use of hydrogen as a reductant and utilisation of biomass. Progress has been made in the evaluation and screening of new process technologies and future energy scenarios.

Thermal mass

The thermal mass of a building can be used to reduce the requirement for active heating and cooling. People instinctively associate the coolness of churches with their mass, but it has far more to do with their lack of windows and low solar gain along with an absence of heat generating electrical equipment and lighting. Optimum thermal mass is mobilised from the first 100mm thickness of concrete floor slab, which is available in standard steel-framed construction. The extra mass associated with heavier weight structures is a waste, which is compounded by the larger foundations required.

To fully exploit thermal mass, the soffit of the floor slab must be exposed. This is a fairly untidy detail in any material, but now Corus can offer a prepainted finish to the ComFlor range of decking giving designers an attractive and economic option.



Case Study: Manchester Civil Justice Centre

Manchester's Civil Justice Centre is the biggest court complex built in the UK since the Royal Courts of Justice in the Strand, London, in Queen Victoria's reign. The striking award winning scheme incorporates several novel environmental features in its steel-framed design.

Structural and services engineer Mott MacDonald was praised by judges at the 2007 Green Construction Awards for integrating engineering and architecture in its environmental solutions for the building. Judges were particularly impressed by the

natural ventilation system, which was a key part of the client's brief. Mott MacDonald carried out extensive modelling to ensure the building could be as naturally ventilated as possible.

The steel frame was designed to accommodate a complex web of ductwork that allows air to be taken in via vents at the sides of the striking atrium which occupies most of one elevation, and circulated through the building. An intelligent building management system brings in back-up mechanical ventilation if required.



Flexible steel prolongs building life

The demands placed on buildings can change for a host of reasons, perhaps because of new technology or just growing business needs for space. Whatever the reason, if a building can't be easily adapted then owners face the costs of demolition and redevelopment. Steel offers a more sustainable solution and steel-framed buildings are among the most adaptable and flexible assets in which a business can invest.

A building with a structural steel frame can be easily and economically adapted to changing requirements, which is a major sustainability advantage. Instead of demolition, a steel framed building can be extended vertically or horizontally with minimum disruption to existing building users and neighbours. Perforations are commonly provided in supporting steelwork to carry services, and extra ducting can be provided in beam webs to allow for future changes to services.

Repositioning of internal walls can be easily achieved in a steel-framed building, as neither the internal nor

external walls are load bearing. Steel framing and flooring systems give easy access to electrical wiring and computer networking cables without disrupting building users.

Developers value the large column free spans made possible with steel - clear spans of over 30 metres are common in single storey buildings and much longer spans can be provided if trusses or lattice construction is used. Financial sector dealing rooms such as those in the City and at Canary Wharf have for long benefited from the column free spaces made possible by the long spans that steel provides.

These spans can be achieved with graceful designs making minimal use of structurally efficient steel. Steel buildings can be kept modern looking throughout their lifetimes by updating with new façades and other architectural features.

Column free spaces in factories and warehouses provide more flexibility in locating fixed equipment, and moveable plant can operate more safely when there are fewer obstructions.



Sustainability triple bottom line

- ✔ **Economic** Long lasting flexible buildings retain their economic value at the end of first use
- ✔ **Social** The demountable stadium was a key element of London's successful bid to stage the most sustainable Olympics ever and generate a six year feelgood factor for the country
- ✔ **Environmental** Buildings that can easily be adapted and re-used avoid demolition and the associated disruption and waste



Case study: Designed for re-use

Steel's demountability was a key factor in London's successful bid to host the most sustainable Olympic Games ever. The Olympic Committee was impressed by London's promise to dismantle and re-erect elsewhere some of the structures being built to house the events.

Industrial buildings are also being designed and built with a view to ease of future re-use. Steel buildings can be easily disassembled and the sections re-erected somewhere else.

A good example of the sort of progress being made possible by steel arose when steelwork contractor Barrett Steel Buildings worked together with its client, major property developer ProLogis Developments, to design a building that could be easily disassembled at the end of its working life, maximising the potential for re-use of steel for no additional cost.

The building selected was a 99 metre long, 10 metre high 50,000 sq ft warehouse at ProLogis Park, Heathrow, which also included a 5,000 sq ft office, and goods and entrance canopies.

Barrett Steel Buildings value engineered all the sections during the design stage to ensure that the re-use potential was maximised. In practice this meant that the design minimised welding and notching, and maximised bolting which would allow for fittings to be easily removed.

This highly sustainable building is now let to airport operator BAA plc after being assembled on time and to budget. This approach is being further developed with ProLogis, as well as being offered to other clients who are looking for more sustainable and demountable buildings.

Steel is the modern manufacturing method

Off-site manufacture is an essential element of Modern Methods of Construction, and it is has always been a key feature of steel construction. All steel construction involves off-site manufacture, which means that steel scores highly on many sustainability criteria as well as being safer, faster and more economic.

Far more accurate workmanship is achieved with steel being manufactured and fabricated off-site. Waste is minimised and a high quality, defect free product achieved. Any waste material arising is 100 per cent recycled and there is rarely any waste on site due to the high quality of product achieved.

In the modern fabrication workshop, where state of the art numerically controlled machinery is fully integrated with CAD software, steel can be easily standardised, tested and certified. Corrosion and fire protection coatings can be applied at the fabrication stage, reducing the overall site construction programme.

Local communities benefit from off-site manufacture as there is much less traffic to sites and far smaller on-site workforces adding to local traffic congestion. Other benefits for local people are that steel construction is dry and dust free and relatively quiet. At the end of its working life a steel building is easily taken down without the noise and dust associated with demolishing masonry or concrete structures, and the steel is all recycled.

Off-site manufactured steel leads to more predictable construction programmes. Surveys have shown that using steel as the framing solution for a commercial building reduces the

construction programme by up to 15 per cent. Site managers benefit from just-in-time delivery, being able to hold fabricated steelwork at depots or at the steelwork contractors' workshop until it is needed, saving space and reducing the possibility of damage from on-site storage.

Once delivered to site, pre-engineered steelwork sections are speedily and safely erected. Steelwork is inherently safer, requiring fewer people to install who are generally well trained. The site activities are predictable and well practised.



Lightweight steel modular construction is increasingly in demand for its sustainability advantages, for example for hotel chains, residential apartments, Defence Estates, schools, healthcare facilities, student accommodation and major regeneration projects. Corus' specialist modular manufacturing arm Living Solutions, designs and manufactures fully factory fitted-out steel-framed accommodation modules that are transported to site and quickly fitted together.

The company is setting a new benchmark for off-site volume manufacturing on a £92 million contract to design, supply and erect 155 Junior Rank Single Living Accommodation (JRSLA) buildings, around 7,905 modules on six sites for Project Allenby/Connaught,

an £8 billion Private Finance Initiative project. This contract, for Aspire Defence, will provide accommodation for army personnel.

The project shows that the still developing off-site based modular building industry can deliver sustainability benefits to the biggest projects. Each building will have 51 room modules built to exacting Ministry of Defence standards on a semi-automated production line at Corus' Shotton works at Deeside, North Wales. Efficient design processes, CAD/CAM-linked production facilities and the potential for client design visualisation, rapid prototyping and flexible production systems enable Living Solutions to design and build buildings of high quality and reliability at affordable prices for customers.



Case Study: Off-site tops out at Snowdon

All projects benefit from maximising off-site construction, but for some it is essential. The new visitor centre on the summit of Mount Snowdon in North Wales was carefully designed to be in keeping with its environment, but building in those exposed and often inhospitable conditions is no easy task. Frequent high winds, heavy rain, fog and low cloud can make some construction site operations even more dangerous than usual, but steel

construction helped overcome these conditions. The site is only accessible by a mountain railway and all plant and steel sections had to fit onto the train's flat bed carriage.

Trial erections were used to make sure that all the structural elements would fit together with ease once they were transported to the summit in 14 metres long 'packages'. Individual elements were marked for easy

identification before being taken to the top in the desired sequence for erection on the same day.

The Hi-Point modular roof on the visitor centre was initially installed during a trial erection of the entire structure which took place at the Corus Shotton facility. The roof was delivered in 35 individual segments, which were erected to make sure they fitted with the main steel frame.

Sustainability triple bottom line

Economic

A quick build means reduced site costs, lower financing costs and earlier returns

Social

Off-site manufacture is recognised as the modern method to create new communities

Environmental

Off-site construction means fewer deliveries, less disruption, reduced noise and less dust

Steel underscores the triple bottom line

Constructing in steel is one of the best ways that our generation can ensure that it does not leave intractable legacy problems for future generations. Sustainability demands satisfying social, economic and environmental criteria - the 'triple bottom line' – and steel ticks all of those boxes.

The world's response to the sustainability challenge is still being developed, there is no right or wrong solution and much work still needs to be done. We have only just started thinking about how to solve the problems. There can be few certain answers given yet to questions that we are still trying to form, but science tells us that the time for action is right now.

A commitment to sustainable development has to guide everything that we do, to ensure that the earth, its ecology and resources are preserved for future generations to enjoy. Steel scores highly on all the key criteria that we know sustainability implies.

Steel has always had a sound sustainability case, and key advantages from recycling, energy and waste minimisation were already routinely benefiting society long before climate change made sustainability such a key issue. Steel designs allow sustainable buildings to be created and the raw materials that we use to make steel are in plentiful supply.

Steel will never become a waste problem to be expensively disposed of by tipping in scarce landfill sites. Steel structures have long lives as they retain their appeal for longer and can be easily adapted, modified, extended or reconfigured to accommodate changing uses. When steel foundations are used there are no legacy problems of redundant and unwanted piles left behind.

Designers need make no special efforts to harness the many sustainability benefits of steel, these are guaranteed as soon as steel is selected for use. No other material can make these claims.

Corus recognises that steel can improve its sustainability credentials even further and, as a socially responsible supplier, is committed to the continuous improvement of its own processes. Corus has a proven long-term commitment to research and development to help the construction industry achieve its aims, and will continue this tradition to meet any new challenges of the world's drive to our sustainable future.

Sustainability triple bottom line

Economic

Steel is fundamental to the development and prosperity of the modern world

Social

Steel is fundamental to modern society and a built environment which people enjoy

Environmental

Steel is an inexhaustible resource



Animals that migrate long distances navigate using our iron planet's magnetic field.

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