



# 2019

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ISSUE 15. 2019

**INEOS**

# WELCOME TO YOUR NEW-LOOK INCH MAGAZINE

*After eight years, we felt it was time for a change. We also felt the new magazine needed to accurately reflect the evolving – and incredibly dynamic – face of INEOS.*

In this edition, we focus heavily on investment – and rightly so. INEOS has already invested in some of the most ambitious projects this century – and it is showing no sign of losing its appetite for growth. For change. For taking calculated risks. For taking on fresh challenges.

This March, INEOS was announced as the new sponsor of Sky's winning Tour de France team – a move championed by Chris Froome, one of the greatest Grand Tour riders in the history of the sport. Just as he shows no signs of slowing down, neither does INEOS.

INEOS is investing in China, in America, in mainland Europe and also in the UK, despite the uncertainty over its future following the EU referendum. Brexit? What Brexit? As far as INEOS is concerned, it's business as usual.

In this edition, we also look at the plastic waste problem, and what can be done to encourage the public to value the benefits of the material. We explore the concept of the circular economy, explain what it means in layman's terms and review how we can get there if we all work together.

We try to debunk some of the persistent myths surrounding the chemical industry and show that without us, solar panels, wind turbines, lighter cars and plastic planes simply could not exist.

The Daily Mile – with INEOS' financial support and founder Elaine Wyllie's passion – continues to gain an army of supporters.

Through our INEOS Team UK bid for the America's Cup, we are enabling the 1851 Trust to encourage more young people, especially girls, to consider careers in science and engineering. And that's the message we were successfully spreading during International Women's Day. We need to attract the very best if our business is to find answers to some of the most complex questions ever faced by society. The challenges are everywhere. But so too are the opportunities.



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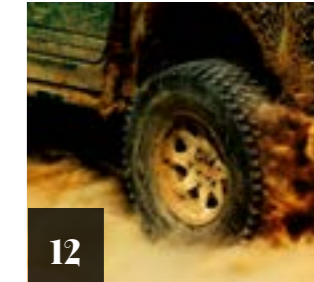
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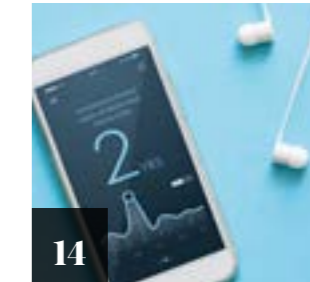
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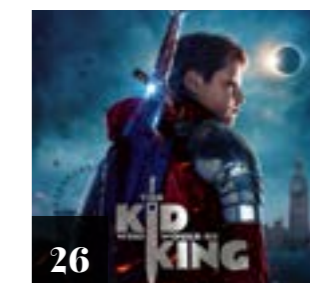
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INVESTMENT

INEOS has invested in some of the most ambitious projects this century. But it isn't done yet. Once again, it started the year in a confident mood by announcing a mega-investment of €3 billion - the largest in the European chemical industry for 20 years.

INEOS investments continue to grow the business around the world and this shows no sign of slowing.

**USA**

In the USA INEOS is adding capacity. Following the start-up of its joint venture high density polyethylene plant with Sasol in LaPorte, O&P USA is looking to see how much more it can get out of the 470,000 tonne/year plant. The company has also started work on an ethylene expansion at Chocolate Bayou, Texas - due onstream in 2020. Oligomers is building the world's largest single-train low-viscosity PAO unit at Chocolate Bayou and its 420,000 tonne/year linear alpha olefin plants are due to start up this year.

**Chocolate Bayou**

INEOS Oligomers' new world-scale PAO plant at Chocolate Bayou, Texas, is due to become operational this year. The plant will obtain its raw materials from an adjacent linear alpha olefin plant, which has also been built.

**LaPorte**

INEOS O&P USA adding capacity at Sasol JV HDPE plant.

**Alabama**

INEOS Phenol is planning to expand the capacity of its plant in Alabama up to 850,000 tonnes a year, making it the largest phenol production unit in the world.

**Gulf Coast**

INEOS Oxide planning to build an ethylene oxide and derivatives plant on the US Gulf Coast.

**Grangemouth**

£350 million investment for a new, highly-efficient power station at Grangemouth in Scotland to supply power and steam to its petrochemical plant, refinery and Forties Pipeline System.

INEOS also planning to increase its cracker capacity to over 700,000 tonnes of ethylene.

**Hull**

£150 million investment in a new vinyl acetate monomer plant at Hull to produce 300,000 tonnes of a chemical widely used in laminated windscreens, toughened glass, adhesives, coatings, films, textiles and carbon fibre. Once open, it will bring production of this important raw material back to the UK.

**North Sea**

£500 million investment to extend the life of one of the UK's most important pipelines well into the 2040's. The 43-year-old Forties Pipeline System carries up to 600,000 barrels of crude oil from the North Sea to the UK mainland every day.

INEOS Trading & Shipping due to take over gas supply in Western Shetlands north of Scotland.

**Stenungsund**

INOVYN investment in Chlor-Alkali Electrolysis Conversion to Membrane Technology.

**Marl**

INEOS Phenol is planning to build a world-scale cumene plant within the integrated Chemiepark in Marl.

Also, a 10th furnace is being built at its plant in Selas-Linde GmbH to improve efficiency and increase production of ethylene.

**Köln**

Expansions of propylene oxide (PO) in Köln.

New INOVYN Chlor-Alkali Electrolysis Cell Room.

**Lavéra**

INEOS Oxide has bought Wilmar's Ethoxylation plant in Lavéra, France. The deal is part of the business' growth strategy to support the increasing demand for ethylene oxide. INEOS now operates alkoxylation assets on three integrated INEOS sites.

**Antwerp**

€3 billion investment. Biggest-ever made by INEOS. First cracker to be built in Europe in 20 years, at Lillo.

A sixth alkoxylation unit now in operation with a planned 2,000-tonne expansion of ethylene oxide (EO) storage capacity at the Zwijndrecht site.

The largest butane storage tank in Europe due to start operating this year. The tank will allow INEOS to buy butane on the world markets as a raw material for its Köln facility and opens up new trading opportunities for its business across Europe.

**Europe**

BELGIUM is to benefit from a €3 billion investment which INEOS has hailed as the biggest in the European chemicals industry 'in a generation'. INEOS plans to build a gas cracker to break down ethane into ethylene and develop a propane dehydrogenation (PDH) unit to make propylene at its site in Antwerp. INEOS Chairman and Founder Jim Ratcliffe said the investment would reverse years of decline in the European chemicals sector.

INEOS Oxide also plans to make a significant investment in ethylidene norbornene (ENB) capacity, location TBC.

**UK £1bn**

INEOS plans to spend £1 billion in the UK - despite the uncertainty surrounding Britain's departure from the EU.

Chairman Jim Ratcliffe said it was business as usual as far as he was concerned.

"It is an uncertain moment for the country," he said. "But INEOS has confidence in its businesses and is committed to continue investing in manufacturing and highly-skilled jobs in the UK."

**Asia**

INEOS has bought its very first manufacturing sites in China. The deal between INEOS Styrolution and French company Total for its two polystyrene production sites was finalised in February and could now pave the way for further investments in Asia. Kevin McQuade, CEO of INEOS Styrolution, says Asia is a growing market and forecasts further investment. Historically China has imported raw materials and exported the finished products. That is now changing.

The world's largest ethane carrier will soon be shipping shale gas to China. INEOS has secured a deal with SP Chemicals to ship the gas to China from the US for the first time.

**Shanghai**

INEOS has opened a new office in Shanghai so all its Chinese business and sales teams can work from one base.

**Ningbo**

The Ningbo site will be producing 200,000 tonnes a year of polystyrene.

**Foshan**

Polystyrene from INEOS' new manufacturing site in Foshan and Ningbo will be mostly destined for the Chinese market.

*INEOS wants to develop site as a centre of excellence and manufacturing hub.*

## Grangemouth to build new power station

**INVESTMENT continues to flow into Scotland following the foundations laid a number of years ago with INEOS' groundbreaking project to bring US shale gas to Europe. In total the site benefited from about £450 million of investment.**

That decision changed the fortune and brought about a renaissance of chemical manufacture at the Grangemouth site.

The latest good news will see the replacement of an ageing energy plant with a £350 million highly-efficient power station, which will also improve the site's reliability.

"It is all part of our wider plans to secure a bright future for manufacturing in Scotland," said Tobias Hannemann, CEO O&P UK.

The new energy plant will not only be able to provide steam and power to the Petroineos crude oil refinery, INEOS O&P's petrochemical production plants and the INEOS Forties Pipeline System, but any other industries tempted to move there and benefit from its

location, infrastructure and supply of US shale gas ethane feedstock.

The new energy plant will benefit from significantly lower SOX, NOX and CO<sub>2</sub> emissions, helping to improve the environmental footprint of Grangemouth.

"This investment is good for business and the environment as reduced energy costs improve the competitiveness of the site," said Tobias. "The new plant will be highly efficient and provide secure energy and utilities as the site grows over the coming decades."

INEOS wants to develop its world-class petrochemical facility at Grangemouth into a centre of excellence and chemical sciences manufacturing hub.

It is a vision it has shared ever since those first shipments of shale gas began arriving from the US in 2016, and preparations to ensure it happens are already underway.

Old plants and empty buildings are being demolished to make way for future

developments and investments.

There is a huge tank on the site where the ethane gas from the US is stored, as well as INEOS' new four-storey HQ, which has brought together 450 people who work for INEOS O&P.

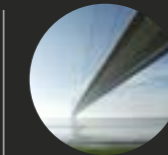
By 2022 the new power station will be part of the site's ever-changing skyline. ➤



INEOS' new four-storey HQ at Grangemouth



## Hull chosen for £150m plant



*It will not only strengthen UK manufacturing but it will boost exports from the UK to Europe and the rest of the world.*

**A NEW plant is to be built at INEOS' manufacturing site in East Yorkshire in the UK. Once built, 300,000 tonnes of vinyl acetate monomer – a crucial component in the manufacture of windscreens, toughened glass, adhesives, coatings, films, textiles and carbon fibre – will once again be flowing from INEOS' site in Hull.**

CEO Graham Beesley said INEOS Oxide was proud to be bringing production of this important raw material back to the UK.

"It's great news for manufacturing in the region," he said. "It will not only strengthen UK manufacturing but it will boost exports from the UK to Europe and the rest of the world."

About six years ago, INEOS was forced to close its vinyl acetate monomer plant in Hull due to cheap imports flooding the UK, mainly from Saudi Arabia and the US, both of which benefitted from low-cost raw materials.

But INEOS' decision to import low-cost, shale gas-derived ethane from the US into its site in Grangemouth in Scotland has changed everything.

The ethane will be converted to ethylene in Grangemouth and then piped to the new £150 million plant in Hull.

In March last year INEOS said it had been considering two possible locations for its new plant. One was Hull; the other was in Antwerp, Belgium.

"We were very fortunate to have two great options in Antwerp and Hull," said Graham.

Work is due to start on the new plant in Saltend, Hull, later this year. ➤

## £500m in the pipeline to modernise FPS

*The pipeline can carry up to 600,000 barrels every day.*

**INEOS plans to spend £500 million modernising one of the UK's most important oil pipelines. Work on The Forties Pipeline System, which can carry up to 600,000 barrels of crude oil from the North Sea to the mainland every day, will prolong its life by over 20 years.**

"Operators in the North Sea oil and gas business are telling us that they are going to be in the North Sea well into the 2040s so we are making the commitment to be there with them," said Andrew Gardner, CEO of INEOS FPS.

INEOS' decision to extend the life of the 43-year-old pipeline, which transports 40% of the UK's oil and gas to the mainland, will be welcomed by operators in the North Sea.

"We plan to modernise the environmental systems and implement the latest technology into its systems," said Andrew. "And we are confident we can do it without disruption to the pipeline." ➤



# €3 billion boost

*INEOS investment will reverse years of decline in European chemical industry*

**BRITAIN is not the only place to benefit. Belgium is also celebrating after Antwerp was chosen for the largest investment ever made by INEOS.**

Frank Beckx, managing director of essenscia Flanders, said the decision to build a new cracker and a world-scale PDH plant was of great strategic importance to the Port of Antwerp.

"It is undoubtedly the most important economic news in a long time," he said. "Not since the 1990s has such an installation been built in western Europe."

INEOS' €3 billion investment will help to reverse years of decline in the European chemicals industry.

"We hope this kickstarts investment and renewal in the European petrochemical market, which has been

stagnant for more than a generation," said John McNally, CEO of INEOS Project One - the INEOS organisation created to realise the project.

It is hoped that other European chemical companies will follow suit, replacing old, outdated technology with energy-efficient systems with low emissions. "This has been happening in America since the shale gas revolution," said John. "We desperately need to see it happen in Europe."

First though, INEOS said the EU needed to scrap its 'foolish' green taxes which had driven investment out of Europe and into America, China and the Middle East.

"The USA is in the middle of a \$200 billion spending spree on 333 new chemical plants," Chairman Jim Ratcliffe wrote in an open letter to European Commission

President Jean-Claude Juncker.

"The USA doesn't have green taxes but it does insist on the very highest environmental standards before it issues permits for new builds."

He said Europe already had the world's most expensive energy and labour laws that were uninviting for employers.

"It is no longer competitive," he said. "And going it alone with green taxes prevents renewal as it frightens away investment. It also pushes manufacturing to other parts of the world that care less for the environment."

INEOS' decision to invest in Europe goes against the grain but it makes financial sense.

For the new cracker and PDH plant in Antwerp, we will be converting huge quantities of shale gas - shipped by INEOS from the US - into two million tonnes a year of propylene and ethylene for its own businesses in Europe.

*'It is the most important economic news in a long time' says Frank Beckx, managing director of essenscia Flanders*

Up to 3,000 people are expected to help build the new plants. Once fully operational in about 2024, circa 400 people will be employed to run them.

Hans Casier, CEO of INEOS Phenol, said it was rather fitting that INEOS has chosen to build the first gas cracker in Europe for 20 years at The Port of Antwerp.

"This is actually the cradle of INEOS," he said. "It is where it all started in 1998."

Bart De Wever, mayor of the City of Antwerp, said he felt humbled by INEOS' decision.

"These are the moments you live and work for," he said. "This is an investment for an entire generation."

He said it also demonstrated that, even in times of Brexit uncertainty, investors still believed in economic growth, internationalisation and sustainable technology.

John McNally said 100 new engineers would be needed to run the plants, and people - both young graduates and experienced engineers and technicians - were already queuing up.

"We have had a massive amount of interest," he said. "For every opening we have, we must have 20 or more applicants. It's an exciting time." ➤

Main image: The announcement of the new investment was made at the Port of Antwerp in the iconic Zaha Hadid-designed Antwerp Port House.

## Enterprising business reaps rewards of smart thinking

**ONE of INEOS' smallest businesses is starting to flex its financial muscles in a big way. INEOS Enterprises has, in just over a year, doubled its turnover to over \$3 billion a year.**

CEO Ashley Reed said the decision to sell two of its businesses - and acquire three others - had been transformational.

"We still cannot quite believe that it has happened," he said. "And we have almost trebled in size."

INEOS Enterprises is made up of a number of small and diverse businesses. Last year it sold INEOS ChloroToluenes and INEOS BaleyCourt to Valtris Specialty Chemicals. But it bought three others. The deal with Flint Hills Resources, for its chemical intermediates business, was completed just before Christmas. The other two are expected to be finalised this year.

Ashley said INEOS Enterprises saw potential for growth in all three. "We didn't go deliberately looking for these businesses," he said. "But we could see ways of improving them."

It is a tried and tested formula. INEOS has built its fortune by buying unloved assets - and transforming them into reliable, productive and profitable companies. The Flint Hills business, which makes purified isophthalic acid, trimellitic anhydride and maleic anhydride, at its production facility in Joliet, Illinois, has been renamed INEOS Joliet.

The business, which also has offices and distribution centres in America, Europe and Asia, sells its products throughout the world to others who use them to help make clothing, paints and gasoline additives. The deal to acquire Ashland's entire composites business is expected to be approved soon.

INEOS agreed to pay \$1.1 billion in November for 20 manufacturing sites in Europe, North and South America, Asia and the Middle East, which employ 1,300 people. Ashland's resins are light, strong and fire resistant and, as such, have been favoured by the world's boat builders for 30 years.

The composites are also increasingly replacing the aluminium or steel frameworks in cars because they are lighter. That, in turn, saves on fuel and increases efficiency.

INEOS Enterprises is also hoping to finalise the deal with Tronox for two American plants which manufacture titanium dioxide, a substance used in sunscreen, cosmetics, toothpaste, paints as well as soap, food colourings and textiles.

"It makes things white and it is very good at it," said Ashley. ➤



*INEOS Enterprises is hoping to finalise the deal with Tronox for two American plants which manufacture titanium dioxide, a substance used in sunscreen, cosmetics, toothpaste, paints as well as soap, food colourings and textiles.*



## INEOS centralises Shanghai teams

**INEOS has opened a new office in Shanghai so that all its Chinese sales and business teams can work from one base.**

Up until last month INEOS had three offices in the city. One it inherited when it bought BP Chemicals in 2005, the second followed the merger of BASF and INEOS Styrenics in 2011, and it gained a third when INEOS recently acquired the Chinese styrenics business of Total.

“By creating one new location, we will be able to provide additional opportunities for our staff to develop and progress in a larger co-ordinated team,” said David Thompson, CEO of INEOS Trading & Shipping.

The official opening of the new office was hosted by Kevin McQuade, CEO of Styrolution, and attended by Minhao Zhou, Mayor of Shanghai Municipal People’s Government, Putuo District. ➤

*Above: Kevin McQuade, CEO of INEOS Styrolution, hosts the grand opening of the new Shanghai office, joined by Minhao Zhou, Mayor of Shanghai Municipal People’s Government, Putuo District.*



# Eastern promise

*Asia is a growing market for us, says INEOS Styrolution*

**INEOS has bought its very first manufacturing sites in China. The deal between INEOS Styrolution and French company Total for its two polystyrene production sites was finalised in February and could now pave the way for further investments in Asia.**

“Asia is a growing market for us,” said Kevin McQuade, CEO of INEOS Styrolution.

“We see the recent acquisition as a platform to build on.”

Historically China has imported raw materials and exported the finished products. That is now changing due to a fast-growing consumer market at home.

About 70% of the future growth for styrenics is expected to come from China, which is home to more than one billion people, many of whom are now demanding modern consumer goods as their standard of living improves.

As the biggest supplier of styrenics in the world, INEOS Styrolution believes investing in China will help it to grow and retain its number one position in the market.

“We not only want to maintain our leadership position in the world,” said Kevin. “We want to strengthen it.”

INEOS Styrolution, which makes plastics for cars, electronics, the toy and construction industries, currently exports products to its customers in China mostly from Korea and Thailand.

But having a manufacturing foothold in China will allow it to better serve its existing core customers, help to develop China’s growing manufacturing industry and build strong, mutually-beneficial relationships across China.

Polystyrene from its new manufacturing sites in Foshan and Ningbo, both of which will be able to produce 200,000 tonnes a year, will be mostly destined for the Chinese electronic, household and packaging markets.

All of those are core markets for INEOS Styrolution, which manufactures about 5.6 million tonnes of styrene monomer, ABS standard and specialties worldwide, 1.8 million tons of which is polystyrene.

Staff at both plants – and the two sales offices in Guangzhou and Shanghai – are now

working for INEOS Styrolution.

“We have received a very positive response from our new colleagues,” said Kevin. “And we are determined to make the integration as smooth as possible for them.”

INEOS is also excited to have acquired a business run by very good and experienced people.

The acquisition in China follows an earlier acquisition in Korea. In 2017, the company acquired the K-Resin® SBC business, located in Yeosu on the South Korean coast.

SBC or styrene-butadiene copolymers is a flexible, clear and strong plastic which is mostly used in the medical and packaging industries.

Kevin explains that both acquisitions were part of the company’s ambitious “Triple Shift” growth strategy, investing in quality higher margin products, high-growth customer industries, and emerging markets around the globe. ●

*‘We not only want to maintain our leadership position in the world. We want to strengthen it’ – Kevin McQuade, CEO of INEOS Styrolution*



*INEOS’ first polystyrene production sites in China could pave the way for further investments in Asia.*

# ALL POWER TO BMW

*Projekt Grenadier  
steps up a gear  
with world-class  
engine deal*

”

*‘We believe  
BMW builds  
the best  
engines in the  
world,’ Dirk  
Heilmann,  
CEO of INEOS  
Automotive*



Keep up to date  
with Projekt  
Grenadier’s  
journey online.

**I**NEOS’ ambitious plans to build a no-nonsense, robust 4x4 have turned another corner. It recently announced that its new off-roader will be powered by BMW’s latest generation of TwinPower Turbo petrol and diesel engines. Dirk Heilmann, CEO of INEOS Automotive, commented “Simply put, BMW builds the best engines in the world. Its petrol and diesel engines offer great durability and unquestionable quality, not to mention high performance and efficiency. We are building an uncompromising working 4x4 and there is no better choice under the bonnet than a BMW engine.”

“This technology partnership is a very significant milestone for Projekt Grenadier,” added Mark Tennant, Commercial Director of INEOS Automotive. “It’s a partnership that clearly signals our intent. Having BMW alongside us makes a strong statement to the rest of the industry.”

Off the back of this announcement, in early April INEOS Automotive held an open day for suppliers in Stuttgart, Germany, with the aim of introducing the company, its values, and the story of Projekt Grenadier so far. “Following the powertrain decision, we are now moving ahead with the nomination of

suppliers for other major components” said Oliver Frille, Director of Procurement at INEOS Automotive. “This supplier day, attended by our engineering partners, MBTech and Magna as well as BMW, allowed us to showcase the ambition of the project to a room full of world-class potential partners in the automotive supply chain.”

The event was attended by over 200 people from 100 different companies representing all major component areas of the vehicle. As well as sharing the ‘Projekt’ philosophy and planning assumptions, Tom Crotty, Group Communications Director, was on hand to introduce INEOS Group – leaving the audience with the story of the Dragon Ships as a great example of supply chain partnerships, the INEOS way.

Since the plans to build its own 4x4 were first hatched over a pint in The Grenadier, the London pub close to INEOS’ HQ in 2016, INEOS Automotive has grown into a fully-fledged international company with bases in the UK and Germany. With a permanent staff of 50 (and growing) at its London base, the team have this April opened a new office in the automotive centre of Böblingen, Germany, to host its design, engineering and procurement teams. The INEOS Automotive office is adjacent to that of MBTech, lead engineering partner for Projekt Grenadier and a former subsidiary of Mercedes Benz. MBTech now has some 200 engineers working full time on Projekt Grenadier.

With two years to go until launch, much remains to be done but the project is making great advances across a broad front. Says Dirk Heilmann: “Chassis and suspension work is ongoing in Austria using our first ‘mule vehicle’; the exterior design is all but finalised, with the interior now progressing well also; following BMW, supplier nominations are now beginning in earnest; and we are now very close to announcing our choice of manufacturing location.”



Invitees to the Projekt Grenadier supplier day had the chance to hear about Projekt Grenadier, INEOS Automotive, and the original offroaders inspiring its new 4x4.



WASTE

NOT

**HOW INEOS  
PLANS TO  
CHALLENGE  
SOCIETY TO**

WANT

**DITCH NEGATIVE  
VIEW OF  
PLASTIC WASTE**

NOT

**WE live in a throwaway society. Food, clothes, electronics and iPhones are all traded in regularly for newer, trendier, smarter goods. But the stark reality of living like that is coming back to haunt us all. For when we throw something away, it simply becomes someone else's problem. It has to go somewhere.**

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**In the case of plastic waste, INEOS believes that has to change – and it has a very clear vision of how it can be done. But it cannot do it alone.**

"We are working with recyclers and our customers to enable plastics to be recycled and incorporated into new products," said Peter Williams, Group Technology Director.

In 2000 Australian organisers buckled under pressure from environmental groups and banned PVC from the Sydney Olympics. The material was effectively labelled a public menace.

Almost 20 years on, PVC has more than proved it is a material fit for the 21st century.

As a result, the material, which can withstand pouring rain, raging seas and blazing sunshine, is heavily used in the construction industry and makes a massive contribution to the world of modern sport.

Every year 640,000 tonnes of PVC are recycled in Europe through the VinylPlus initiative and INEOS anticipates increasing it to 800,000 tonnes by 2020.

Polyolefins – the plastics found in milk bottles, food packaging and medical applications – can also be recycled.

Again INEOS is working with recyclers and customers to find a way of making new grades of plastic that could be blended with recycled material to make a high quality finished product.

"The next step is to better re-use coloured materials to make premium quality products," said Peter.

But mechanical recycling, as it is known, is limited because each time plastic is recycled it loses some of its quality.

"We are also limited by our ability to be able to recover clean and pure plastic waste," said Peter.

Where plastic cannot be recycled, we can recover the energy contained in the product.

INEOS does something similar at the plant in Runcorn in the UK.

But INEOS wants something more from the process. Locked inside every shred of plastic are valuable raw materials – essentially hydrocarbons – and INEOS wants them back.

INEOS is now evaluating technologies capable of turning all plastic waste – no matter how contaminated – back into its original raw material so it could be fed back into INEOS' plants to make new, high quality products.

"The key advantage is that using this approach all plastic waste, even the lowest value mixed waste, can be recycled," said Peter.

For polystyrene, chemical recycling, as it is known, can be especially effective, because the process causes the polystyrene to de-polymerise, which produces a styrene monomer product that can be fed back into the polymerisation reactor.

"Although it's early days, and the technical challenges are significant, progress is being made, especially at INEOS Styrolution where recovered monomer liquids are already being tested in our pilot plants," he said.

*Chemical recycling is seen as the holy grail because it will mean the chemical industry reduces its reliance on fossil fuels – oil and gas – to make its products. Waste plastic will be its new, valuable raw material.*

Peter said that as well as developing new polymers and new ways of recycling plastics, a large investment is needed by governments around the world in infrastructure for collecting, sorting and managing waste. "To achieve real change in recycling, and also to solve the problem of land and ocean litter, each of us – the chemical industry, governments and other organisations, and the public – all need to play our part." ▶

## THE 2012 OLYMPIC STADIUM FEATURES A TENSILE MEMBRANE PVC ROOF



## PVC IS LABELLED FIT FOR 21ST CENTURY

**THE world will soon learn just how far PVC – a plastic once demonised by so many – has come. Details of how many tonnes of PVC were recycled last year will be published at the VinylPlus General Assembly in Prague in May this year.**

"We are reasonably bullish that yet again VinylPlus will provide a step increase in recycled volumes for 2018 but tonnages have yet to be audited," said Dr Jason Leadbitter, Sustainability & Corporate Social Responsibility Manager at INOVYN.

That said, he's confident that the figures will demonstrate that PVC, one of the most widely used plastics in the world, deserves to be at the heart of the circular economy.

Since 2000, Recoverivyl – the recycling arm of VinylPlus – has recycled more than four million tonnes of PVC window frames, pipes, flooring, cables, packaging, tarpaulins, furniture and medical devices.

Jason said it had been possible because everyone in the value chain – the PVC manufacturers, the additives' producers, converters and recyclers – had been involved.

What's more, VinylPlus, which has pledged to recycle 900,000 tonnes of PVC by 2025 and at least one million tonnes by 2030, is a voluntary commitment and has not been imposed on industry.

"Voluntary commitments provide a huge incentive to create win/win opportunities for both industry and regulators because they save on red tape," he said.

Another initiative from the VinylPlus programme has been the recent launch of a label that helps customers to easily identify products which have been responsibly manufactured.

So far six window manufacturers have been given permission to display the new VinylPlus® Product Label – Vinyl Verified – on their products.

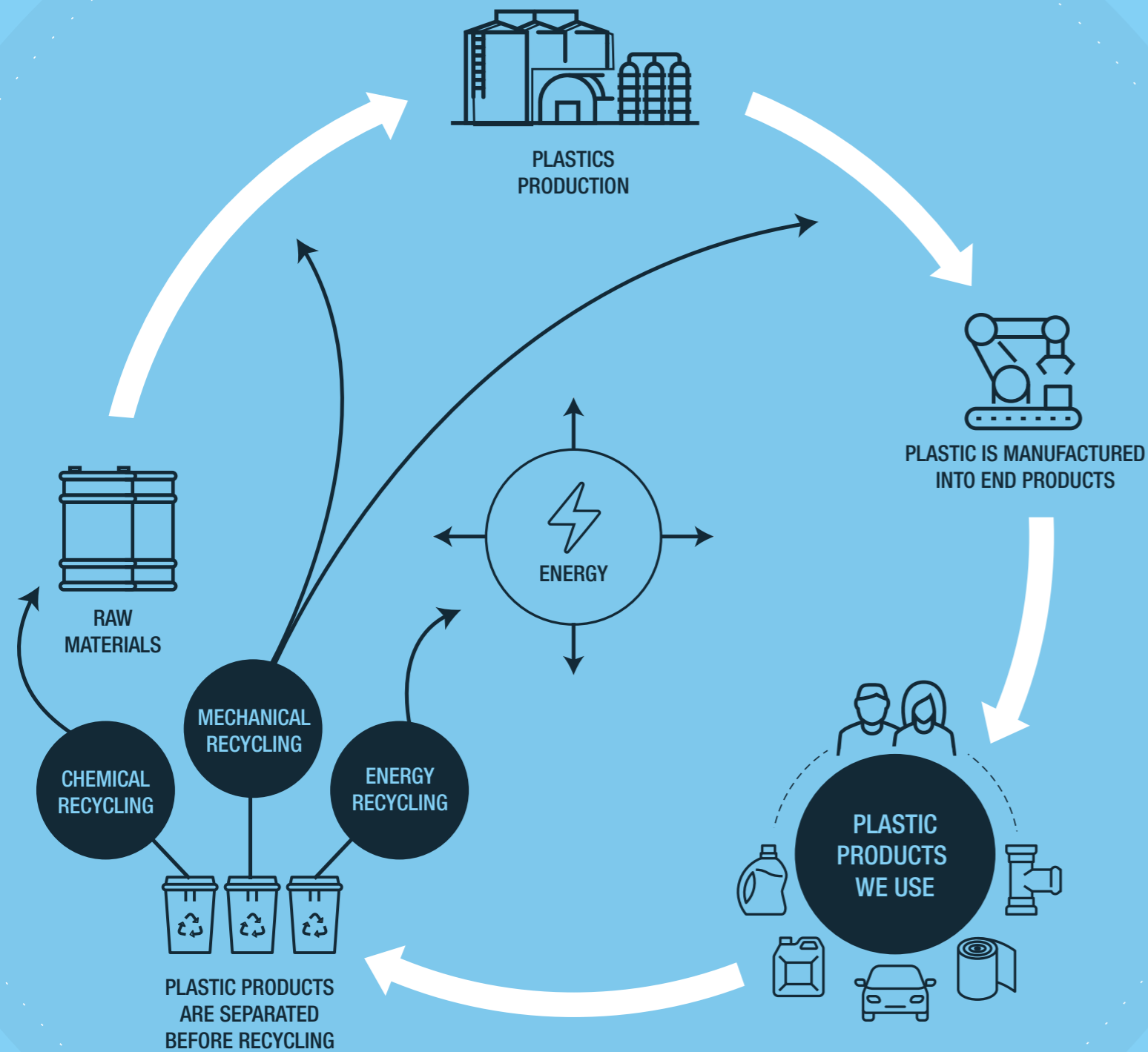
"The label is a differentiator in the market," said Jason. "It has been seven years in the making but it's exciting that it's finally been launched and adopted already."

The initiative, initially aimed at the construction industry, has been developed by VinylPlus, with help from BRE Global and The Natural Step, and INOVYN is proud to be part of it.

"The label itself allows companies to raise the bar from a sustainability perspective," said Jason.

To meet the demanding criteria, INOVYN has also played its part in demonstrating responsible manufacturing of the PVC resin itself. ▶

VINYLPLUS HAS RECYCLED MORE THAN FOUR MILLION TONNES OF PVC



# WHAT IS A CIRCULAR ECONOMY

## – AND HOW DO WE GET THERE?

**IN nature, waste doesn't exist. Everything that dies returns to the earth and grows again. In short, it goes full circle. Our economy operates in a different way. We make, take and then simply throw things away.**

But a shift in global thinking could help us to create a circular economy. An economy, in which we create products, sell them to consumers, who then return them so that the components can be recycled into new products.

"Recycling won't eliminate all litter," says Peter Williams, Group Technology Director. "Stopping littering needs better

waste management in many parts of the world, but it also needs a collective behaviour change. We need to think about what is required in different parts of the world, then wage war on plastic litter, not plastic itself- which benefits us in many ways." Peter said there was no silver bullet.

"The recycling technology of today is too limited," he said. "New technologies and a mix of approaches will be needed, but we don't yet know what the mix will be."

Legislators' and regulators' needed to understand that, and not favour one technology over another.

"We need a framework to encourage

the development of different approaches from which the most effective ones will emerge," he said.

The same applies to NGOs, which he says are at their best when they deal directly with industry, so that challenges and practicalities could be shared and understood before any vision is created.

"They play an important role in raising questions, but usually the answers have to come from elsewhere, and especially from the industries concerned. Stakeholders who refuse to engage are approaching the issue with one eye closed."

## WE ALL HAVE A ROLE TO PLAY, SAYS INEOS

**INEOS believes that efforts to create a circular economy – and help keep plastics out of the ocean – needs industry-wide participation if they are to succeed.**

"Everyone has a role to play in helping to tackle this issue: Government, industry, NGOs and the public," said Peter Williams, Group Technology Director for INEOS.

As such, INEOS is working closely with others businesses from across the world who want to transform today's take, make, dispose economy into one where plastics are designed to be used over and over again.

Unfortunately, The Ellen MacArthur Foundation, which recently launched its Global Commitment programme as part of its New Plastics Economy, will not be a partner.

INEOS was told late last year that some of the foundation's stakeholders did not want to be associated with an industry

that extracted raw materials from the earth.

"I was surprised, because we had worked hard on a meaningful pledge," said Peter.

INEOS and the foundation had agreed ambitious recycling targets, which were due to be included in the foundation's Global Commitment.

"The foundation was seeking commitments to the circular economy, in the form of hard targets, from all participants in the polymers value chain," he said, "so I was disappointed to find us being excluded at the last minute. To achieve a circular economy, which we all believe in, our industry has to be engaged. It has the incentive, the know-how and the capability to make a difference."

The foundation told INEOS, which is one of the biggest polymer producers in the world, that it had been a difficult decision but it was only a "temporary hold".

Not wanting to dwell on the

disappointment, though, INEOS quickly launched its own global pledge to move towards a more circular economy for plastic packaging.

"We think it is possible – through innovation and partnership – to retain the value of our polymers by rethinking the way we produce and recover them at the end of their life," said Peter.

**AS PART OF ITS COMMITMENT TO A NEW CIRCULAR ECONOMY, INEOS HAS SET ITSELF FOUR AMBITIOUS TARGETS TO MEET BY 2025. THIS IS OUR PLEDGE:**

## OUR PLEDGE

**1** OFFER A RANGE OF POLYOLEFIN PRODUCTS FOR PACKAGING APPLICATIONS IN EUROPE CONTAINING 50% OR MORE RECYCLED CONTENT

**2** USE, ON AVERAGE, 30% RECYCLED CONTENT IN PRODUCTS DESTINED FOR POLYSTYRENE PACKAGING IN EUROPE

**3** INCORPORATE AT LEAST 325KT/A OF RECYCLED MATERIAL INTO PRODUCTS

**4** ENSURE 100% OF POLYMER PRODUCTS CAN BE RECYCLED

*Wind turbines and solar panels would simply not exist without the chemical industry*

# Renew your thinking

**O**UR world is changing. And no one is immune. Dwindling natural resources, a growing population, poverty and climate change are forcing us to face up to some of the most complex questions ever asked of mankind.

The public very often does not see a role for the chemical industry in creating a sustainable economy. It is seen as a sunset industry. An industry that's had its day. Fossil fuels – gas and oil – are in the past. What the world needs is renewable energy.

"It can be frustrating," said Peter Williams, INEOS' Group Technology Director. "People don't see a link between the chemical industry and solar panels, wind turbines, lighter and more fuel-efficient transport. But we can't just sit and complain about that."

Wind turbines, solar panels, electric and lighter, more fuel-efficient cars would simply not exist without the chemical industry.

"We all have to up our game on communication of what we do, where materials come from, why they are used and the benefits they bring," he said. "To us, the measure of a sustainable economy is one that leaves the environment untouched or improves it, that creates affordable and sustainable products, and that provides employment in communities."

As the world's population continues to rise, it is estimated that 9.1 billion people will need food and water by the year 2050. Plastics have a very strong role in providing effective products and services which this growing population needs.

The actual solutions come from companies like INEOS, who provide the materials to face future challenges, for example the material infrastructure such as plastic pipes required

## WHY WE MATTER

Our products enhance almost every aspect of modern life.

Without us, society, as we know it, wouldn't function.

We are helping to create the path to a lower carbon economy, starting with our processes and products.

And we are doing all we can to work towards a circular economy.

## HOW WE WORK

We operate in a responsible, safe & efficient way.

We talk to local communities and support them where we can.

We work with other industries to try to share precious, natural resources.

We recruit the best so that together we can find the best solutions to society's greatest challenges.

to carry fresh water to people living in some of the poorest parts of the world. Unlike steel pipes, they are cheap, easy to install, rarely leak and can last up to 100 years.

Plastic packaging which is often perceived as unnecessary, extends the shelf life of fresh fruit and vegetables and, in doing so, dramatically reduces food waste.

The Environmental Protection Agency in America recently revealed that food rotting in landfills released methane, a greenhouse gas 21 times more potent than carbon dioxide.

The UN estimates that every year 30% of food produced throughout the world is wasted.

The cost is the retail equivalent of \$1 trillion – twice the GDP of Norway.

One major UK supermarket recently stopped selling loose fruit and vegetables because so much was going to waste.

The Food and Agriculture Organisation said nature was also bearing the cost, with \$172 billion of water wasted producing the unwanted food.

"The products we produce and supply to other industries and society enable significant resource and energy savings," said Petra Inghelbrecht, INEOS Styrolution's Global Sustainability Manager.

INEOS also manufactures chemical products that are used to make insulation for people's homes. As it stands, poorly-insulated homes produce tonnes of greenhouse gases.

But INEOS isn't just focused on its customers. It is always looking for new ways of doing things that keep its own business one step ahead.

Saving energy has always been

READ MORE →



## WIND TURBINES

Plastic composites and carbon fibre are now the materials of choice for wind turbine blades because they are lightweight and incredibly strong. INEOS is the world's number one supplier of acrylonitrile – the main component in carbon fibre. Many of the turbine blades are getting longer. Metal provides the strength but it is too heavy. Plastic composites are allowing blades to grow in size but stay light, strong and flexible. Wind turbines are also tough enough to withstand rough weather, on and offshore, because they are made of plastic. They are also lighter and stronger, and so have opened up the way to larger and more efficient turbines. INEOS' high quality lubricants are also used to keep the gearboxes working efficiently. Traditional materials, such as steel, cannot offer the performance now achieved.



### SOLAR PANELS

INEOS makes many of the raw materials that go into solar panels including the support mounts and housings. And all are made using gas. In fact, solar cell production is quite chemical and gas intensive. Manufacturers use a whole host of gas and chemical products, including ammonia, nitrous oxide, methane, hydrogen fluoride, phosphine and diborane. Many believe the growth in the solar cell market could actually drive a new wave of growth for the gases industry.



### CARS

THERE are about 1.4 billion cars on the road. As regulations demand greater and greater fuel efficiency, plastic is increasingly the material of choice for dashboards, bumpers, body panels, engine parts, and fuel tanks because it is lighter, it is strong, it can be recycled and it doesn't corrode. Demand for better fuel economy and better performing engines has also led to an increase in the interest in low viscosity engine oils. INEOS Oligomers provides the manufacturers of synthetic oils and additive suppliers with the high performance base oils that help to improve a car's overall efficiency. And PVC is used to coat the wiring of electrical components in cars because it is flame resistant and, unlike rubber, doesn't perish. It is also used as car body underseals to stop corrosion.

fundamental to how INEOS operates. "Our sustainability efforts include a broad range of projects which are focused on improving process efficiency at all our production plants," said Petra.

She said INEOS always sought to get 'more for less' by cutting down on the amount of raw materials and energy it used to make products – and limiting the amount of water and waste by-products, such as CO2.

It makes sense to INEOS as a business to keep down costs, and nowadays it's customers who want and expect all measures to be taken to minimize negative impact on the environment.

*"Our industry may be energy and carbon-intensive, but it is highly efficient," said Peter. "If we use fewer raw materials and less energy to make something, there are fewer emissions. Good business and the circular economy are in this sense well aligned."*

And it's happening at many of INEOS' sites around the world.

In Thailand, water is recycled from the centrifuges so it can be reused in the production process.

In India, rainwater harvesting facilities have been built to conserve rainwater for re-use on site.

In the UK, household waste is now diverted from a landfill site to INEOS' site in Runcorn where it is incinerated in a combined heat and power plant to produce electricity and steam.

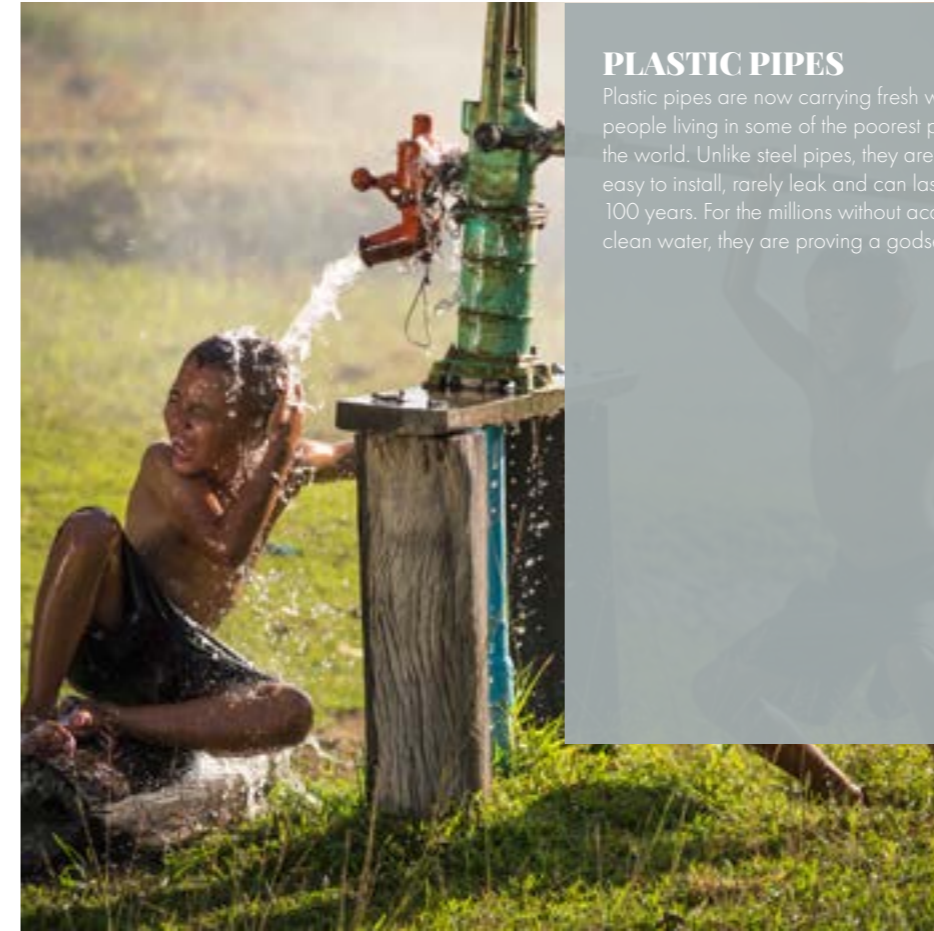
In short, INEOS never stops looking for ways to do things more efficiently.

That's why you will often find its businesses on some of the largest integrated chemical sites in the world, be it in Belgium, Germany, Sweden, China or France, where they can share ideas and resources with other companies.

Last year INEOS was chosen to head up a four-year project to help different industries understand how energy, materials and services could be shared more efficiently. The idea is that one man's waste is another man's treasure.

"To me the project is all about thinking creatively about how to build a more sustainable future," said Hélène Cervo, a research engineer and PhD student at Lavera in France.

INEOS believes that a circular and sustainable economy is achievable. And the chemical industry, with the incentive, know-how and capability to make a difference, is key. ➤



### PLASTIC PIPES

Plastic pipes are now carrying fresh water to people living in some of the poorest parts of the world. Unlike steel pipes, they are cheap, easy to install, rarely leak and can last up to 100 years. For the millions without access to clean water, they are proving a godsend.



### AIRCRAFT

INEOS was instrumental in helping to get Boeing's 787 Dreamliner 'plastic plane' off the ground. Being predominantly plastic, the 787 is much lighter than Airbus' 380 and, as such, travels much further with the same amount of fuel. But while Boeing's new commercial jet has flourished, Airbus' superjumbo – the world's largest passenger aircraft – has been scrapped due to lack of interest. The 787 was the first commercial jet with a carbon fibre fuselage and wings. Acrylonitrile from INEOS is essential for the production of carbon fibre for this and also many other uses. The advanced materials are known as composites, which can also sustain higher cabin pressure at high altitudes than traditional aluminium-bodied planes, so passengers are likely to suffer less from jetlag. The jet also burns 20% less fuel than similar-sized jets and its maintenance costs are 10% lower.



## Sweden creates climate for change

**SWEDEN has become a beacon of hope for a better, cleaner and more efficient world thanks to some of the world's leading chemical companies.**

Among those companies, currently involved in Sustainable Chemistry 2030, is INEOS Sverige AB.

Since 2010 the five companies in Stenungsund have been quietly focusing on increased recycling of plastic, and using plastic, instead of oil and gas, to make products.

"It is important for us to exploit the full value of plastics," said Elin Hermansson, Project Manager of Sustainable Chemistry 2030.

Chemical companies are working with academia, politicians and scientists to find the best way to use waste as a resource - and break their dependence on the Earth's reserves of oil and gas. Increased recycling of plastic will help.

The group has also developed a concept that would mean recycled plastics could be made into fresh, raw materials and new products.

"This concept could close the loop for plastics and recycle 100%," said Elin. "Pre-studies of this have also shown there is large potential for a reduction in CO2 emissions."

There have also been ongoing projects related to energy efficiency within the chemical cluster.

A site analysis, carried out by Chalmers University of Technology and funded by the Swedish energy agency, showed a big saving potential – a 10% reduction in CO2 emissions - when all five companies were considered. Follow-up projects have also shown that it is possible.

"The chemical cluster already meets more than 97% of the demand for district heating in Stenungsund," said Elin. "But despite that, there is still a huge amount of excess heat that goes to waste."

One solution might be to build a 30km pipeline so it can be used as district heating by people in Gothenburg.

"All these are major challenges but we want to help build a future society where we use renewable resources to develop more sustainable products," she said. ●



# INEOS inspires a new generation of women



*The 1851 Trust is a dynamic and innovative education charity committed to inspiring young people to become innovators of the future and stewards of the environment.*

*We harness the power of professional sport to challenge perceptions and to excite more young people about the opportunities in Science, Technology, Engineering and Maths (STEM).*

**W**OMEN'S voices have been heard at INEOS for years because the company values their contribution to science and engineering. INEOS just wants to hear more of them.

As part of International Women's Day, one of INEOS' charities, The 1851 Trust, harnessed the power of sport to excite the imaginations of 120 young girls – and help bring science to life.

The girls had been invited to the Portsmouth home of INEOS Team UK, the team behind Britain's bid to win the world's oldest and most coveted trophy, The America's Cup.

"Using the excitement around The America's Cup was a great way to bring children in," said Amelia Gould, Chief of Staff at BAE Systems, who was at the event to help show schoolgirls that STEM (science, technology, engineering and maths) subjects are not just for the boys.

During the day the girls, aged 11 to 13, were shown how the INEOS team has been using science and technology to design and build a 'flying' boat capable of 60mph and powered only by the wind.

The girls also met young women apprentices and graduates working in STEM industries, and remarkable women sailors Dee Caffari MBE and 1851 Trust Ambassador Annie Lush, who have both sailed around the world.

The 1851 Trust, which is the official charity of INEOS Team UK, used the occasion to launch its Next Generation Roadshow for Girls programme.

The programme, which is aimed at inspiring a new generation of female STEM role models, will be rolled out across the UK this year thanks to funding from the UK Government's Department for Transport.

Research throughout the world has shown how young women regularly shun careers in science, technology, engineering and maths.

"We want to change that because we understand completely the need to bring new and diverse talent into the chemical industry," said Anne-Gret Iturriaga Abarzua, Head of Communications at INEOS in Köln, who flew in from Germany to attend the UK event.

INEOS in Köln has successfully addressed the interest in science among all young people for the past 11 years through the TuWaSI Programme, which encourages primary and secondary school children to ask questions rather than receive ready-made answers.

Its champion is Anne Gret and INEOS in Köln is the biggest financial supporter in the Rhineland where it sponsors 34 schools.

In the UK though, young women represent just 22% of those in STEM careers. However, with an estimated 174,000 STEM roles due to be unfilled next year, it is vital that the gender imbalance is addressed to plug the gap.

Ben Cartledge, CEO of The 1851 Trust, said it had been wonderful to see a new generation of girls inspired to explore the possibility of a STEM career – and INEOS Team UK's base had been the perfect place to do it where cutting-edge technology is being employed to design and build the fastest sailing boat in the world.

"STEM has already played such a crucial role in The America's Cup campaign," said Anne-Gret. She added: "We are now exploring ways of bridging the efforts in the UK and Germany by learning from each other."



*Main image: Round-the-world sailor Annie Lush discusses the lifelong importance of STEM subjects.*

*Top Left: The girls watch ice cream being made with liquid nitrogen.*

*Bottom Left: A captive audience.*

*Right: VR headsets transport students onto The America's Cup boats.*

*Far Right: The school groups try out INEOS Team UK's new 'tech deck'.*



You can find out more about the science behind INEOS TEAM UK's challenge on the 1851 Trust's STEM Crew website, which is supported by INEOS.

The website contains exciting videos and resources developed for school children. Last year the resources were used to bring STEM alive to over 85,000 students. [www.stemcrew.org](http://www.stemcrew.org)

# The Daily Mile

*One woman's vision to improve children's fitness has now spread all over the world. INCH looks back at what has been achieved so far ...*

#### The Daily Mile articles

1. *Fitter, leaner, healthier, happier.*
2. *Movie stardom*
3. *Focus on academic achievement*
4. *£1.5million provides solid foundation for The Daily Mile*
5. *Royal blessing*





The stars of *The Kid Who Would Be King* took a rest from filming to shoot a trailer calling on children everywhere to rise up – and run *The Daily Mile*.



# 1

## Fitter, leaner, healthier, happier

To date, over 1.7 million children in 61 countries now regularly run *The Daily Mile*, a simple initiative dreamed up by a Scottish headteacher who was worried about her unfit pupils.

"I can hardly believe it myself," said founder Elaine Wyllie.

Since that day in 2012, when Elaine witnessed her own pupils wilt after attempting to run around the school field without stopping, her simple campaign has won worldwide recognition and backing from the likes of Wimbledon champion Sir Andy Murray, athlete Sir Mo Farah, Manchester United footballer Jesse Lingard and more recently The Duchess of Cambridge.

*'We should make The Daily Mile part of every childhood and watch as it improves our children's health and wellbeing now and for the rest of their lives' – Elaine Wyllie*

Research has shown that children who run it are not only fitter, leaner, healthier and happier, but they are also

more eager to learn when they return to their desks.

In short, it has been absolutely phenomenal. Yet, few had heard of Elaine until 2015 when she was named Teacher of the Year in the Pride of Britain awards. At that star-studded awards ceremony in London, Elaine was so star-struck, snapping selfies with the likes of Ozzy Osbourne, that she missed her last bus back to the hotel.

But the following day, other schools started taking notice of what she was doing, as did INEOS Chairman Sir Jim Ratcliffe.

He had founded a similar initiative, GO Run For Fun, and decided to meet Elaine to see if INEOS could help financially to roll out the programme.

It was a meeting of minds. INEOS was on board.

By March 2016, The Daily Mile Foundation was officially launched, and things started snowballing.

Studies were being carried out into the effects of a child taking a quick active break from their desks every day.

Children from a primary school in Surrey in the UK revealed they had run 58,522 miles since The Daily Mile was launched in their school. That's effectively running around the world. Twice.

In May last year UK Prime Minister Theresa May praised The Daily Mile in the House of Commons as an 'excellent programme' and called on schools to sign up.

Two months later the Government's Childhood Obesity strategy was published and included the 'fantastic Daily Mile initiative' as a way to 'improve the physical, social and mental wellbeing of our children regardless of age, ability or circumstance.'

Last year, ITV partnered with The Daily Mile, launching its first-ever ad campaign and offering editorial coverage.

The result was amazing. The number of schools signups increased 150%.

This year Hollywood film-makers 20th Century Fox have helped to launch an innovative new ad campaign to encourage children to rise up and run *The Daily Mile*.

A spoof trailer of *The Kid Who Would Be King* was released on ITV just a few days before the film (about a modern-day schoolboy who finds King Arthur's legendary sword) opened at cinemas throughout the UK.

In it, the star of the movie, Angus Imrie, tells pupils at the fictitious Dungate Academy: "You must gather

your team of knights. Your quest is to join *The Daily Mile* and get fit for life. Who will swear allegiance and run with us?"

Every day a school, wanting to adopt *The Daily Mile*, gets in touch with the team at The Daily Mile Foundation, who are based in INEOS' Hans Crescent, London, office.

For Elaine, who was awarded an MBE in this year's New Year's Honours List, it doesn't get much better than this.

But as time has shown again and again, it most certainly can. >



*The Kid Who Would Be King* is helping to spread the word about *The Daily Mile*.

# 2

## Movie stardom

**Hollywood Knights Lay Down the Gauntlet to Children Everywhere.**

A SPOOF trailer of *The Kid Who Would Be King* has been made – to encourage children to rise up, take charge of their health and run *The Daily Mile*.

The trailer was released, with 20th Century Fox's blessing, on ITV just a few days before the film (which is about a modern-day school boy who finds King Arthur's legendary sword) opened at cinemas throughout the UK.

It features all the main stars, including Angus Imrie (Merlin the wizard), Louis Ashbourne Serkis (the boy who finds King Arthur's legendary sword) and Rebecca Ferguson (an evil sorceress and old enemy of Merlin).

In it, Angus tells pupils from the fictitious Dungate Academy: "You must gather your team of knights. Your quest is to join *The Daily Mile* and get fit for life. Who will swear allegiance and run with us?"

Maria Buttaci, Partnerships Manager at 20th Century Fox, said they were delighted to be partnering with ITV, INEOS and *The Daily Mile*.

"*The Daily Mile* is a wonderful initiative that aligns perfectly with the film's central theme of encouraging children to unite together for an epic quest," she said. >

READ MORE >

# 3 Focus on academic achievement



**THE university, which has given the world penicillin, synthetic dyes and holography, is now exploring the merits of The Daily Mile.**

London's Imperial College has agreed to work with The Daily Mile Foundation to collate all the research that has already been published or is due to be published over the next three years. It will then build a structured study to test the impact of the initiative on children's mental and physical health, which can be more widely adopted across the world.

The research will include the UK Government-supported National Childhood Measurement Programme (NCMP) as a secondary data set.

Over the years there has been plenty of anecdotal evidence about the benefits to a child's health and well-being of running – or walking – The Daily Mile every day. It seems like common sense.

Studies and surveys have shown children are more energised, confident, and do better in the classroom after a 15-minute break from their desks.

The initiative has also won praise from the likes of Sir Mo Farah, Sir Andy Murray and Paula Radcliffe.

What's been lacking is the scientific proof.

"We're very excited with the growing body of research looking at The Daily Mile around the world. Our partnership with Imperial College London is invaluable, as they can help us independently verify the impact," said Emily Carson, Research Coordinator for The Daily Mile Foundation.

At the end of Imperial College's research, academics will publish a comprehensive report that covers everything from attainment, mental health, fitness, to the socio-economic effects of implementing The Daily Mile.

The hope is that it will strengthen the Foundation's hand when it approaches policy makers, future partners and key decision makers, as well as motivating more schools to adopt the initiative. >



**1.78m +**  
Number of children running The Daily Mile around the world

**0**  
The cost of joining The Daily Mile. It's free, simple to implement and the children love it

**15**  
The number of minutes children should spend outside running, or walking, The Daily Mile at their own pace

**2030**  
The UK government wants to halve childhood obesity by 2030 and believes The Daily Mile will be key to helping to achieve that



## £1.5million provides solid foundation for The Daily Mile

**SPORT England has pledged £1.5 million of National Lottery funding to spread the word about The Daily Mile.**

Its new partnership with The Daily Mile Foundation will pay for 11 local, one northern and one national co-ordinator to encourage more school children in England to run – at their own pace – for 15 minutes every day.

But that's not all.

London Marathon Events Ltd has also joined forces with the Foundation.

From next month, a strategic lead and two part-time staff will be working in the London Marathon offices to encourage every primary school in London's 32 boroughs to run The Daily Mile.

Sir Mo Farah, who will be running this year's London Marathon on Sunday April 28, said The Daily Mile was a brilliant and easy way to get kids moving.

"I am a dad of four and I encourage my kids to be active every day," he said.

So far, about 3,500 schools in England take part in The Daily Mile. The vision, though, is for every school – all 20,000 of them – to be involved.

"This will put rocket boosters under the campaign," said The Daily Mile's founder Elaine Wylie. "It's absolutely incredible and we are very grateful for the support. They are going to help us roll out The Daily Mile and try to reach every child in England."

Sport England decided to throw its considerable weight behind the campaign to raise healthier, fitter and slimmer children after publishing the largest childhood measurement survey of its kind – the Children's Active Lives Survey 2018 – which showed that more than 2.3 million children in England do less than 30 minutes of physical activity a day.

"It was the strongest evidence yet that not enough was being done to support our youngsters, and that change were needed if we were to increase activity levels," said Tim Hollingsworth, Sport England CEO. >



*"The support of Sport England will put rocket boosters under the campaign"*

– Elaine Wylie

# 5 Royal blessing

**OVER the years thousands of parents have witnessed the positive effects of The Daily Mile.**

Last month it was royalty's turn to see how a child's physical health can affect his or her mental well-being.

The Duchess of Cambridge was at London's Lavender Primary School as the pupils headed outside to complete 10 laps of the playground during their 15-minute break from the classroom.

She was there as patron of Place2Be, a leading UK children's mental health charity, to mark UK Children's Mental Health Week.

The Duchess later shared her experience on the Kensington Palace twitter feed, endorsing the positive benefits of The Daily Mile (@KensingtonRoyal).

Headteacher Jodie Corbett, whose school has been running The Daily Mile for some time, said it was a once-in-a-lifetime experience.

"It is one which we will all cherish for a long time to come," she said. ●







Pictures supplied by Richard Shibles

# The Wind in their Sails

*INOVYN trio help sail 125ft tall ship across the Irish Sea*



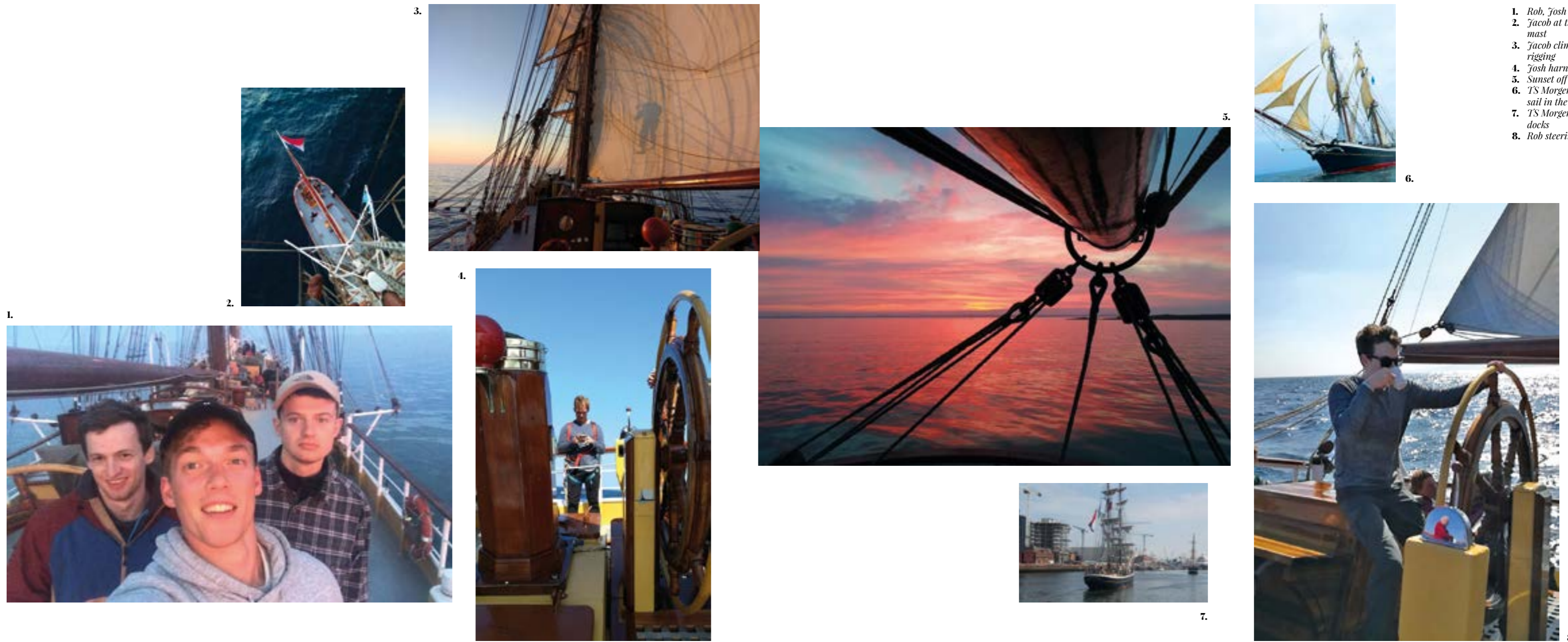
*Rob Raven, 25,*



*Jacob Dossett, 24*



*Josh Murray, 24*



1. Rob, Josh & Jacob
2. Jacob at the top of the mast
3. Jacob climbing up the rigging
4. Josh harnessed up
5. Sunset off Lambay Island
6. TS Morgenster under sail in the Irish sea
7. TS Morgenster at Dublin docks
8. Rob steering the ship

**I**NEOS has arguably cornered the market when it comes to offering its graduates the experience of a lifetime on land (see In Nam Challenge, p37).

So it was only a matter of time before it looked for an equally exciting adventure to show them what they were truly capable of – at sea.

The challenge was the chance to race 16 other vessels from Liverpool to Dublin on board a 125ft tall ship.

The Merseyside Adventure Sailing Trust's Apprentice Ship Cup is billed as a life-changing adventure, one that strengthens character, fortitude and self-confidence – and with thrill-seeking Jim Ratcliffe at INEOS' helm, that was always going to appeal to the company.

"Climbing the 95ft masts while the ship is at sea certainly gets the blood pumping," said Jacob Dossett, one of the three INOVYN graduates who competed in the race.

To give its graduates a taste of what might be expected in the race, INOVYN had arranged for them to meet the captain of a tall ship berthed at Liverpool Docks.

"We wanted them to see for themselves the vessel that they would be spending the best part of a week on," said Brian Turner, INOVYN Learning & Development Manager.

When they got back to the office, all were keen to join the ship's crew for the challenge.

"Unfortunately, the timing meant some of our graduates already had commitments that couldn't be changed," said Brian. "But three of our graduates signed up."

For almost a week Rob Raven, 25,

Jacob Dossett, 24 and Josh Murray, 24, with the other crew members worked in shifts around the clock to steady the ship, remain on course and stay motivated.

"It was good fun pulling together especially when the weather was challenging," said Jacob. "All three of us worked a 12-hour stint to keep on course when many other members of the crew were down with sea sickness."

For Rob, adapting to working with a team of mixed abilities and motivation was the biggest challenge.

"It was hard but being thrown into such a mixed team helped me to develop team working, networking and leadership skills," he said.

All three are now back on dry land – and have done themselves and INEOS proud.

They were aboard the TS Morgenster, a 99-year-old former deep sea vessel, which finished the race – the initial leg of the Tall Ships Regatta – in first place.

*'Climbing the 95ft masts while the ship is at sea certainly gets the blood pumping'*  
– graduate Jacob Dossett

"It was amazing to win," said Jacob. "But we could not have done this without INOVYN's support. It was paid for, organised and driven by the INOVYN team."

The three also shared the award for the best trainee on board.

"Normally there is only one award but the captain and professional crew could not distinguish between them, so they got one each," said Tony Moorcroft, INOVYN HR Director.

But the good news did not end there.

The Merseyside Adventure Sailing Trust weren't only impressed with the quality of INEOS' graduates. They rather admired the company's ethos too – and at the recent awards ceremony at Liverpool's Merseyside Maritime Museum, INOVYN was awarded the Apprentice Ship Cup for 2018. "That was a big surprise," said Brian.

The Cup recognises the importance of the role played by the sponsors – and the work they do behind the scenes to support

their graduates and promote the event.

INOVYN won it for a combination of the graduates' attitude together with the professional dealings with Brian and Procurement Manager Joanne Skyner.

INEOS is gaining quite a reputation among graduates – both inside and outside the company.

Those who join INEOS know that a real job, training and incredible experiences await them from day one.

"It is starting to set us apart from other companies," said Brian.

In May this year, INEOS will once again take a group of its 3rd year graduates to Africa to embark on a 250km run and cycle through the untouched Namibian desert.

"We love challenges like these because it is an opportunity to take the graduates into a very different environment and test their ability to adapt quickly," said Brian. "These opportunities also help them to discover what unique

qualities they have and show them what they can achieve by working as a team."

Not only has the experience on board the TS Morgenster shown INOVYN's graduates the importance of communication and teamwork, they have also learned a thing or two about sailing and that the best way to a happy crew is to keep everyone fed and watered.

"The whole experience has definitely brought us all closer together," said Josh. "And that's really useful given that we share an office."

# GO TEAM MOMO

This spring, INEOS Phenol in Gladback have been eagerly following the progress of apprentice Mohamed "Momo" Chahine on "Deutschland sucht den Superstar", the top German TV talent show, where he has qualified for the live show voting rounds.

A talented singer, Momo only really started singing seriously at 18, and has surprised both himself and his colleagues by making it so far in the tough competition. He has a very large fan club at work, where INEOS has produced t-shirts for his many friends and family to support him in the spotlight.

He says, I am incredibly grateful to INEOS – the company has supported me in every possible way. In particular I would like to thank my trainer Christian Schulz and my manager Benie Marotz, who have both always been there for me and supported me.

We'll be wishing him luck and cheering him on through the live rounds.



## INEOS GO RUN FOR FUN BACK ON TOUR

**As spring comes around and the weather gets warmer, running season has arrived. And the INEOS GO Run For Fun schools run event tour is kicking off for another year, bigger and better than ever.**

Look out for events in schools around your area, many of which will be asking once more for the assistance of INEOS and local volunteers to marshal and cheer the children around their 2km runs. This year's tour will take place in the same international locations as previous years, with participation numbers still growing, and will feature new events in Tavaux, France (24th May) and Stavanger in Norway (5th September).

Some of the events this year will have record numbers of participants. In France, the INEOS GO Run For Fun Sarralbe event on 28th May, will have over 4,000 children running, while there will be over 3,000 children at Lavera's October event and 2,000 children at both Lillo and Feluy's Belgian events in

June and September.

On 20th June, the annual flagship event will be held at London's Battersea Park, where over 4,000 children from across the capital and further afield will take on a fun run course - and attempt to set a warm-up dance world record. A few weeks before, the GO Run For Fun team in Italy will have celebrated the 300,000th participant at an event in Rosignano.

Amidst this continuing success, the charity is next looking to increase the reach of participation by trialling an "Event in a Box" programme, allowing schools to host their own GO Run For Fun runs. INEOS GO Run For Fun has also partnered with the Solomon Trail Running Festival to pioneer youth trail runs across the UK.

**More information and the full schedule of events can be found on [www.gorunforfun.com](http://www.gorunforfun.com)**

# BACK TO THE DESERT

**After two successful cohorts of the In Nam challenge, another group of INEOS graduates are heading for a week in the Namibian desert this May to run, cycle and hike their way across 335km of unforgiving landscape and take on Namibia's highest mountain, The Brandberg.**

The 29 graduates selected will be the largest group yet, and have been training hard over the past year to ready themselves for the adventure. Spread across Europe and North America, the team have encountered a variety of conditions in their training - particularly this winter - but will be guaranteed to face 7 days of intense heat and wind as they battle the sand, the rock and the elements.

The journey began a long time ago, however. Preparation has been thorough, with each graduate having completed at least two training marathons and two mountain biking events - alongside months of running, gym, strength and conditioning. The graduates have been supported by John Mayock, INEOS' Head of Sports and mentors from last year's event, as well as nutritionists CorePerformance and African guides Gregg Hughes and Phill Steffny, who will lead them through the desert. This year, the group will also be supported by senior managers Hans Casier (CEO INEOS Phenol) and Gordon Milne (Operations Director INEOS Grangemouth) who will take part in each kilometre of the challenge alongside them.



To find out more about the trip, and follow the daily blog when the graduates arrive on 15th May, please see [www.in-nam19.com](http://www.in-nam19.com)



## INEOS ENERGY STATION

MELY SHED OVER 3ST (22+KG) IN JUST SIX MONTHS

ALLAN LOST 14ST (89KG) IN THREE YEARS



## A WEIGHT OFF THEIR MINDS

Mely and Allan find motivation through INEOS' Energy Station

**IF you want to weigh up what change can do, take a look at Mely Scheidegger and Allan Slater. Both have lost weight thanks to INEOS' Energy Station.**

Allan lost 14st (89kg) in three years; Mely shed over 3st (22+kg) in just six months. "We are proud of both of them because change takes grit, determination and perseverance," said John Mayock, who founded The Energy Station.

But Mely's goal was never to lose weight, despite being about 15st (96kg).

"I had been thin when I was younger, so I had no problem being fat," she said. "I felt fine the way I was."

But her mindset changed after a disastrous trip to Machu Picchu in the Andes Mountains in Peru with her daughter and nephew.

"When I got there I realised how unfit I was," she said. "It was so bad, I almost had to pay to be flown back down to Lima."

It was the wake-up call she needed. At 63, and with plans aplenty for once she'd retired, she realised she needed to be fitter.

Energy Station coach Bram Boeve, who also now works for INEOS Football SA, stepped in to

help. "It was as though the stars were aligned," said Mely and Bram. To blame was Mely's lifestyle.

Although she didn't smoke, rarely drank alcohol, and didn't snack throughout the day, she was simply eating too much – and too much of the wrong foods at the wrong time.

"I didn't used to bother with breakfast and then I would eat food that was quick and easy once I had got home from work," she said.

Bram gave her tips on how to balance her diet: cut down on the amount of carbohydrates such as pasta and mashed potato, eat fewer proteins and choose more greens.

She also worked out three times a week for 30 minutes at the INEOS gym in Rolle, Switzerland, where she is a senior financial accountant for INEOS Group.

The advice and exercise programme, put together by Bram, worked. Within weeks Mely stated to crave healthier food instead of pasta, and was buying, cooking and enjoying fresh food from local farms, sharing her findings with anyone who would listen.

Other benefits followed. Her health, fitness and outlook on life improved, and old clothes, which she'd worn when she was slimmer, had come back into fashion. "Her transformation has been amazing," said Bram.

Meanwhile, Allan embarked on his quest to lose weight in 2015. First he looked at how much he was eating and decided to cut out salt and sugar.

But he did not join INEOS' gym in Grangemouth, Scotland, where he works in engineering support, until late 2017 because he feared he was too heavy to do any exercise.

"I actually thought exercising at that point could have been far more detrimental to my health," he said.

Today, both Allan and Mely are shadows of their former selves – and much happier. ●

## FITNESS INITIATIVE RUNS SMOOTHLY

US staff bet wages on improving children's health

**AN INITIATIVE to get American children fitter is running successfully in the Houston area thanks to the can-do attitude of INEOS staff.**

They have been regularly funding and organising GO Run For Fun events for the past four years.

"The first-ever Go Run For Fun was so well received by the pilot schools that INEOS decided to keep it going but unfortunately, we couldn't find a company that could run the events for us," said Kathryn Shuler, who is based at INEOS' O&P site in Texas.

So INEOS O&P USA did the next best thing. It founded a children's health and education charity which now raises money to host the runs, delivers the runs, enables schools to buy materials for special projects and helps out in the event of local disasters, such as Hurricane Harvey. ●

So far, INEOS vendors and employees have contributed \$650,000 through fundraising events and direct donations, with proceeds funding GO Run For Fun and other events. Teams from INEOS Oligomers, O&P USA, Oxides and Styrolution have staged more than 70 fun runs for over 45,000 children. The foundation has also donated \$75,000 to schools in support of educational programmes and more than \$15,000 for disaster relief.

"We want our communities to be full of healthy, educated kids," said Kathryn. "So our mission is to work with teachers and schools to help children to become more physically active and educated."

About 20% of children in Texas are classed as overweight.

"Local employees are key to the foundation's fundraising efforts," said Kathryn, Executive Director of the foundation.

Some might make a one-off donation to a specific campaign; others contribute on a monthly basis through their wages.

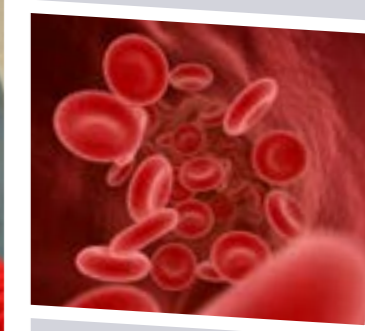
Other staff highlight forthcoming fundraising events to vendors and another group of employees regularly volunteer to help at fundraising events.

Working closely with Kathryn are Lori Ginsburg and Sara Cassells. Lori's job is primarily marketing and fundraising; Sara's in charge of logistics.

"Inactivity is at an all-time high and our kids need exercise," said Kathryn. "INEOS employees, vendors, and the ICAN Foundation are here to help." ●

## Our People

Many of our employees, business partners and broader INCH readers are actively supportive of great community and international causes. If you'd like to share information about a project needing wider assistance which might be of interest to the INCH readership, please contact us on [inch@ineos.com](mailto:inch@ineos.com) and we'll look to feature it below.



## Pete's story...

*A British father with incurable blood cancer is appealing for the help of INEOS' staff throughout the world.*

PETE McCleave must find a blood stem cell donor who matches his mixed, unique Chinese-Portuguese heritage if he is to survive.

"Everyone has a genetic twin somewhere out there," he said. "I am just still looking for mine."

Pete, who lives in the Cheshire village of Bunbury, which is also home to INEOS' Communications Director Tom Crotty, was diagnosed with myeloma in March 2017 – just six months after he had completed one of the toughest triathlons in the world.

He had gone to the doctors complaining of backache after the Ironman Wales Triathlon and was told he had seven years to live.

"I just didn't see it coming," he said. "I had no history of illness. And even to this day, I look at myself in the mirror and acknowledge that on the surface, all may look in hand but beneath my skin, there is a battle going on. My body is attacking itself."

The disease has affected 41-year-old Pete's immune system.

But a donor's healthy stem cells could be transplanted into his body to give him a new one – and effectively change his life.

"What you realise is that we all have a connection, not just to our immediate circle of friends, but to each and every person on this planet," he said. "We have so much more in common with one another than not."

Anyone between the ages of 18-55 and in general good health can become a potential blood stem cell donor.

For more information about DKMS, which is an international, non-profit organisation, go to:

[www.dkms.org/en](http://www.dkms.org/en)

# TEAM SKY TO BECOME TEAM INEOS

**A TEAM of winning cyclists, who have dominated the Tour de France for years, will soon be riding under INEOS' banner. For Team Sky is to become Team INEOS.**

From May 1, INEOS will become the sole owners of the team, who have enjoyed unprecedented success and inspired millions of people to cycle regularly.

In a tweet, Chris Froome, who has won Tour de France four times for Team Sky since 2013, said: 'So excited that we as riders and staff will be able to continue on together for 2020 and beyond. Looking forward to continued success as Team INEOS.'

INEOS Chairman Jim Ratcliffe said INEOS was delighted to take on the responsibility of running such a professional team, who have amassed 327 victories, including eight Grand Tours.

That responsibility will pass to INEOS ahead of the Tour de Yorkshire, which starts in Doncaster on May 2.

Team Principal Sir Dave Brailsford said it heralded the start of a hugely-exciting new chapter for the team.

"In INEOS, I know we have found the right partner whose vision, passion and pioneering spirit can lead us to even greater success on and off the bike," he said.

Over the past few years INEOS has been running its own Tour de France Challenge for staff.

Each year teams of up to 20 are invited to complete each stage of the world's most famous cycle race.

The only difference is that as the real riders chase each other through the French countryside for the coveted title, INEOS' teams squeeze in their mileage before, during or after work. Now they will also have a vested interest in a team on the road to watch as well. ●



Well that's it for this  
edition of INCH.

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