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ISSUE 20. 2020

INEOS

INEOS KEEPS ITS FOCUS

NO ONE could have predicted that a virus would paralyse the world. But overnight, the world changed as countries went into lockdown to stop the spread of COVID-19. What didn't change – and hasn't changed – is INEOS' focus.

Where it could, it helped in the fight against COVID-19. By building plants in days to manufacture millions of bottles of hand sanitiser for thousands of hospitals which were in short supply. By setting up an INEOS Community Fund to seek out and support hundreds of smaller organisations, which were struggling to help those hardest hit by the global pandemic. Both those efforts are rightly highlighted in this edition of INCH. But INEOS has also been focused on its vital role in helping to tackle climate change. That hasn't gone away. If anything, the world got a glimpse of what life could be like with reduced emissions of carbon dioxide.

In this edition, Chris Stark, CEO of The Committee on Climate Change, said he hopes governments across the world will wake up to the very real benefits of hydrogen – a gas that INEOS has been championing and using across its INOVYN businesses for years. The pandemic also highlighted the need to be self-sufficient. During the height of the crisis, there was a critical shortage of hand sanitiser in Europe with the UK, France and Germany all struggling to get hold of supplies from China and Turkey. INEOS, which manufactures the two active ingredients for hand sanitiser, responded by launching a new business – INEOS Hygienics – to sell its hospital-grade products to the public for the first time.

The INEOS sports teams have also been back in action thanks to those products. Mercedes-AMG F1 started the season as they mean to go on – out in front. But they also found time to help INEOS launch its new business at Silverstone, home of The British Grand Prix. INEOS TEAM UK trained safely through the summer – and are now on their way to New Zealand.

INEOS' football teams are also getting back down to business, OGC Nice looking good on and off the pitch after signing Belstaff as their official apparel partnership. And TEAM INEOS became The INEOS Grenadiers as they helped to raise awareness of INEOS' new, uncompromising 4 x 4 at The Tour de France. The news always comes thick and fast. And this year has been no exception.

As we look back on 2020 so far, it has been quite a journey. A bit bumpy in places. But the road ahead looks full of opportunities, such as the acquisition of BP's petrochemicals business. And anyone who knows INEOS, knows that those opportunities will not be missed.



MERCEDES AMG Formula 1 from pole position, launched INEOS Hygienics through The British Grand Prix at Silverstone this summer.



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04



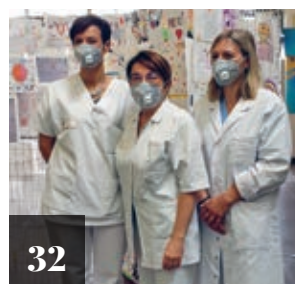
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A STAR IS BORN

After months and months of speculation, the covers have finally come off The Grenadier, INEOS' rough, tough 4 x 4. It's a huge milestone for the team at INEOS Automotive who have been itching to show it off to the world.

"Most manufacturers would hold back, but we are a new business, building a new brand, and we want to take people with us on this exciting journey," said CEO Dirk Heilmann.

He said it also meant the team could now openly test it without the need for camouflage wrapping, foam blocks or fake panels. Over the next 12 months prototypes will rack up more than one million miles (1.8 million km) as its durability and capability is tested in all conditions.

"We have a challenging programme ahead," said Dirk. "But showing the design now allows us to focus on this critical next phase. Since day one, our philosophy has been function over form, every time."

The Grenadier is due to go on sale late next year and expectations are high. "Our customers will be living and working in their vehicles so they know what they want from them," said Dirk. ➤

DESIGN

The Grenadier has been designed rather than styled. It combines practicality and purpose with unmistakable character. From the no nonsense boxy body and exposed hinges to the iconic circular lights. 'We're considered every square millimetre,' says Toby Ecuyer, head of design.

REAR DOORS

The Grenadier's rear doors are a 70/30 split of the back of the vehicle and open independently. That means you can quickly load and unload smaller tools, while also being able to open both doors for maximum access. A rear-mounted spare wheel maximises ground clearance.

WHEELS

The Grenadier's wheels are as close to the corner of the vehicle as possible, with very little overhang at the front and rear. That means you get the approach and departure angles needed for off-road performance.

Discover more: www.ineosgrenadier.com





HOW INEOS GOT THE SHOW ON THE ROAD AFTER A PINT IN THE PUB



It was an opportunity to raise the bar that INEOS founder Sir Jim Ratcliffe simply couldn't resist. Why shouldn't INEOS build a spiritual successor to one of the most iconic 4 x 4s on the planet? What was stopping it? As he and his colleagues walked out of that London pub, they had a dream. A dream that has now become a reality.



They serve one of Yorkshire's finest beers at The Grenadier, a small pub in the heart of London. It's a convenient place just around the corner from INEOS' headquarters for Jim Ratcliffe to pop in for a pint and a chat with a few colleagues. Over a glass of Timothy Taylor's, they lamented the demise of Land Rover's iconic Defender. That single comment ended in the group walking out with a £600 million plan to build its spiritual successor. And what better name to choose for it, than where the idea was born . . . The Grenadier? So that's what they have called it.

Tony Whitehead, who has been landlord of The Grenadier for 10 years, is incredibly proud of the pub's role in inspiring INEOS' rugged, stripped-back 4 x 4. "It's already a world-famous pub because of its history," he said. "But we feel very proud of the part we have played in this story."

The Grenadier, though, was originally known as The Guardsman when the pub opened in 1818. It later changed its name as a mark of respect to a Grenadier soldier who was murdered for cheating at cards.

On the ceiling are £5 notes, pinned there by visitors in an attempt to pay off the soldier's debt. Among them is a note from Jim who had drawn two Land Rover Defenders on it.

Over the years scores of famous faces, including the late Hollywood star Burt Reynolds, singer Miley Cyrus and actor Will Ferrell have passed through the doors of the pub. "Jim's in good company," said Tony. That, though, was almost three years ago.

In July, The Grenadier – the 4 x 4 they had talked of building that day – was finally unveiled. Jim had always had a very clear vision of what he hoped it would look, and feel, like.

Tom Crotty, INEOS' Communications Director, remembers that first phone call when told of the plan. "I was surprised," he said. "I knew Jim liked new things. But this was totally different. But then, given Jim's love of the Defender and his commitment to manufacturing, it wasn't actually that surprising."

Initially eyebrows were raised at INEOS' decision, with no experience, to build a car from scratch. "I am convinced people expected us to fail because it would have been a challenge for the car industry to launch a new car," said Tom. "But for the chemical industry to attempt it? That was seen as crazy."

Undeterred, Tom and his team invited people regarded as the world's best car designers to a 'beauty pageant'. The best were selected to

present their findings to Jim.

These were experts with a clear vision of the direction of travel for the car industry. The ones who knew what the public would want. "That meeting didn't go well," said Tom. But that meeting showed any doubters that INEOS was serious about this.

It had to be exactly right. And what Jim had been shown, certainly was not what he was looking to create.

"We were coming at this from scratch so we were not bound by the traditional thinking of the car industry," said Tom. "We weren't interested in sat nav, autonomous driving and cruise control."

Instead Jim turned to a trained ship's architect who had never designed a car. Toby Ecu-

'IT WAS A HERCULEAN EFFORT BY DOZENS AND DOZENS OF VERY TALENTED PEOPLE TO BRING THE GRENADIER LIFE'

– TOBY ECUYER, HEAD OF DESIGN

er was creative director of British design studio RWD and had designed Jim's yachts, Hampshire II and Sherpa.

He liked to design using paper and pencil, and a rubber, not a computer. He was also a big fan of the Land Rover Defender and, as such, understood its unique appeal.

"I love the fact that The Defender was classless," he said. "I really like people like that. People who are comfortable having tea with the Queen one minute, then rolling their sleeves up the next to mend a fence. To me a Land Rover Defender was all of those things."

Designing The Grenadier was engineering-led. Its performance mattered more than anything. "Certain aspects we could get very creative with and worked very closely with Jim and Sebastian in Germany," said Tony. "We would suggest, interpret and develop ideas."

"I have no idea exactly how many designs we have done. Every aspect of the vehicle was thoroughly designed so we produced thousands of drawings."

Tom believes The Grenadier will succeed ➤





because of the passion, dedication, determination and meticulous attention to detail shown by all those working on the project.

Toby feels that too. "I'm very proud to have played my part in this," he said. "But it was a Herculean effort by dozens and dozens of very talented people to bring this life."

Projekt Grenadier – as it was known – was spear-headed by Dirk Heilmann, a former head of Engineering and Technology at INEOS O&P.

He too had no experience of the car industry but crucially understood INEOS' mindset and the fact that INEOS is not a typical blue chip company.

As CEO of INEOS Automotive, though, he needed someone with commercial clout. That someone was Mark Tennant who had the commercial know-how and industry experience.

"We knew straightaway that he was the right person," said Tom.

Over the past three years, they have led and motivated an international team of specialists with a shared vision of designing and building an uncompromising 4 x 4 that is capable of mastering roads, crossing rivers and climbing mountains.

About 60 companies are involved. All of them are top notch.

Austrian engineering firm Magna Steyr has over a century of experience developing some of the world's toughest off-road vehicles. Its engineers have designed and built The Grenadier's suspension set-up that will meet the needs of people who use their 4 x 4s for work every day.

"We fatigue tested for hundreds of hours on the test rig which simulates 300,000 km off road use," said Matthias Maier, development engineer.

The Grenadier's suspension set-up is completely free of electric components so it is robust and easy to maintain. To perfect it, the team dissected the world's most renowned off-roaders, benchmarked them and then combined the very best engineering ingredients to create something even better.

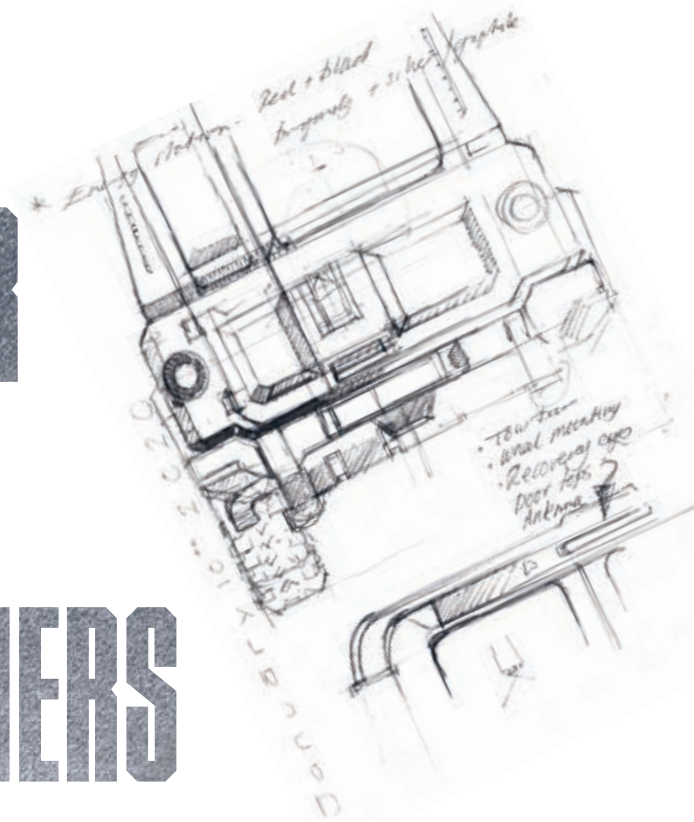
And Carraro, with a long history in building tough 4 x 4 vehicles, has developed the front and rear axles.

The Grenadier, which will be powered by BMW's latest 3.0-litre petrol and diesel engines, is expected to go on sale next year.

"We were told many times that what we were doing, could not be done," said Dirk. "But that was a nice little incentive for me." ➤



THE DESIGNER WRITTEN OFF BY HIS TEACHERS



TOBY ECUYER left school with his teachers' poor assessment of him ringing in his ears. "I wasn't especially good at anything at school," he said. "They suggested the best I could hope for was a job in a factory packing shampoo." Today, Toby is not only one of Britain's best superyacht designers, but he is credited with creating the design on a bit of paper that inspired INEOS' no frills' Grenadier – despite the fact that he had never designed a car.

Toby was brought in after INEOS founder Jim Ratcliffe rejected the motor industry's expert view of what his new 4 x 4 should look like.

"It was a departure from yachts but not as big a departure as it might seem," said Toby.

It was only after he left school and spent a year on a youth training scheme, that his aptitude for design was spotted – and he was encouraged to apply for a foundation course at South Devon College of Arts.

There he discovered an amazing talent for design. "My lecturer pushed me to excel and was adamant that I should be an architect," he said.

With his lecturer's support and a strong portfolio, Toby gained a place at The Plymouth School of Architecture, run by Professor Adrian Gale.



Toby Ecuier

The Grenadier has been designed by an internationally recognised product designer who prefers to use a pencil and paper.

A trained architect, and former partner and Creative Director at RWD, Toby has designed, custom built and tailored super yachts for clients all over the world with fastidious attention to detail.

"I was accepted on the course with no qualifications at all other than a cycling proficiency certificate and a Blue Peter badge," he said.

It was while he was in Plymouth that he learned to sail and later took up sailing professionally in the Mediterranean.

When he returned to the UK, he got a job as a junior designer in EPR architects but missed the water.

By chance he saw an advert in Yachting World for a designer, who needed to be able to draw, but no experience was necessary.

"That was the start of 20 years designing boats," he said. "I was in my element. I loved the amount of detail that was involved and the breadth of design scope. Quite often I would design the interior, exterior, the furniture, the ironmongery the tableware, the cutlery, the crew uniforms, even luggage, and board games."

When Jim met him, Toby had become creative director at RWD. With Jim's help, Toby went on to design the interior of his superyacht Hampshire II and both the interior and exterior of Sherpa.

"I prefer to draw on paper because it's instant," he said. "It's a straight path from brain to page."

"It's really magical to be able to sit with someone and turn that picture in their mind into more than just a thought." ●

FARMERS' ARMY

INEOS Automotive has not just been focused on building the world's best 4 x 4. The team has also helped UK farmers to recruit a modern-day 'land army' to harvest millions of tonnes of fruit and veg that was in danger of rotting in the fields.

Dirk Heilmann, Chief Executive Officer of INEOS Automotive, said UK farmers had been facing their biggest challenge since the foot and mouth disease. "They needed 80,000 people to complete their harvests," he said.

INEOS helped Farmers' Weekly to establish and promote a recruitment website, allowing people to search for harvesting jobs and other roles near their own homes. Farmers could advertise jobs for free on The Farmers Army website www.thefarmersarmy.co.uk, by calling 020 8652 8638 or emailing recruitment.services@rbi.co.uk



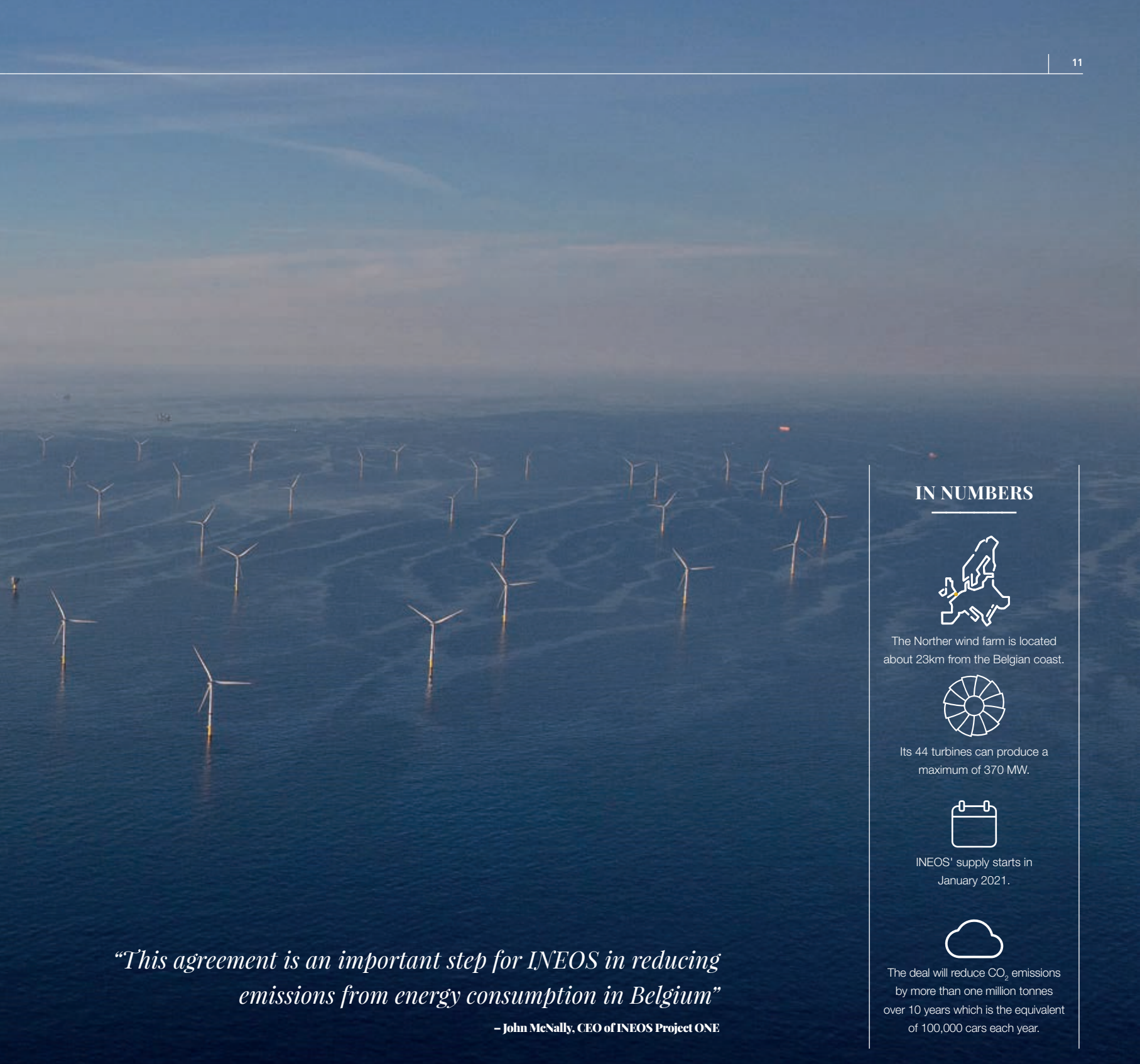


WIND

OF

CHANGE

INEOS SIGNS DEAL TO REDUCE CARBON FOOTPRINT
BY 1,150,000 TONNES OF CO₂ FROM NEXT YEAR



“This agreement is an important step for INEOS in reducing emissions from energy consumption in Belgium”

– John McNally, CEO of INEOS Project ONE

INEOS has signed a deal which will reduce its carbon footprint in Belgium by more than one million tonnes of CO₂. The CO₂ saving will be the equivalent of taking 100,000 cars off the road each year.

Gerd Franken Chairman of INEOS Olefins & Polymers Europe, said the 10-year deal with energy producer ENGIE was also the largest-ever purchase contract of wind energy for heavy industry in Belgium. “This is just the first of many environmental investments from our business,” he said.

INEOS, he said, was committed to helping to shape the circular economy by using ‘green’ energy, instead of gas and oil, to make its high-value chemical products. “This agreement is a further step towards that,” he said. Renewable electricity will be supplied to INEOS from

ENGIE’S Norther offshore wind farm in the North Sea from 1 January 2021. Initially it will be used by INEOS’ production sites, but will later feed into INEOS’ new cracker and world-scale PDH plant in Antwerp to produce ethylene and propylene.

John McNally is CEO of the project, which was set up to manage that €5 billion investment. “This agreement is an important step for INEOS in reducing emissions from energy consumption in Belgium,” he said.

INEOS’ new chemical complex in Antwerp will be the most energy-efficient of its kind in Europe, using the newest technologies. “Our propane dehydrogenation unit has been designed with a maximum level of electrification, which makes it possible to virtually eliminate indirect emissions by using only green electricity,” he said. “And in the coming months, we will continue to look at the options for further expanding the use of renewable energy.” INEOS’ commitment

to Antwerp has been described as the most important investment in the European chemical industry for 20 years. INEOS now hopes other European chemical companies will follow suit and replace their old, outdated technology with energy-efficient systems with low emissions.

The Norther wind farm is located about 23km from the Belgian coast. Its 44 turbines can produce a maximum of 370 MW. Of that, INEOS has secured 84MW. ENGIE is the largest producer of green energy in Belgium. “We are proud to help INEOS meet their environmental goals, by facilitating their consumption of renewable energy in Belgium,” said CEO Philippe van Troeye.

She added: “This contract also illustrates ENGIE’s strong ambition to increase renewables’ development in Belgium, as several PPAs have been signed with major companies during the last months.”

IN NUMBERS



The Norther wind farm is located about 23km from the Belgian coast.



Its 44 turbines can produce a maximum of 370 MW.



INEOS’ supply starts in January 2021.



The deal will reduce CO₂ emissions by more than one million tonnes over 10 years which is the equivalent of 100,000 cars each year.



INEOS TO ACQUIRE BP BUSINESSES

INEOS has agreed to buy more of BP's unwanted businesses. This time, the company has gone after BP's global aromatics and acetyls businesses which consist of 15 sites across the world and 10 leading joint ventures.

INEOS Founder Sir Jim Ratcliffe said the \$5 billion deal was a good fit with INEOS' existing assets. The deal will reintegrate the Hull site and expand the existing INEOS footprint at Geel, Belgium. "It is a logical development of our existing petrochemicals business," he said.

The Geel BP site is Europe's most important

producer of purified terephthalic acid. PTA, as it is known, is used to make PET soft drinking bottles, textiles, film, polyester clothing and food packaging, such as boil-in-the-bag pouches for rice. It also brings with it Infinia™ advanced recycling technology for PET.

BP's aromatics business is currently a global leader in purified terephthalic acid and paraxylene technology with six sites. Its acetyls business, with nine sites, produces acetic acid and derivatives for the food, pharmaceuticals, paints, adhesives and packaging industries. ●

PTA - APPLICATIONS



FOOD AND DRINK
CONTAINERS AND
PACKAGING



FIBRES FOR CLOTHING
AND HOME
FURNISHINGS



INDUSTRIAL AND
HIGH PERFORMANCE
FIBRES



PET SOFT
DRINKING BOTTLES



ELECTRICAL
INSULATION

A BREAK FROM THE NORM

INEOS EXPLORES ALL AVENUES TO CUT CO₂

CORONAVIRUS gave the environment a break. Pollution levels in many cities in lockdown fell dramatically as people and flights were grounded.

As the world now wakes up again, many hope it will be business as usual. Others, like Chris Stark, CEO of The Committee on Climate Change, don't.

But he is not blind to the needs of the chemical industry and views it as part of the solution, not the problem. And that's how INEOS sees its role too.

INEOS is already heavily involved in scores of ambitious projects that could bring about huge benefits for the environment – without compromising the needs of

society. It has started to explore whether huge volumes of carbon dioxide could be stored in depleted oil fields in the North Sea as part of a plan that would slash greenhouse gas emissions.

It has also joined a powerful consortium to investigate plans to produce sustainable methanol, a chemical widely used as a raw material in everything from clothing to fuel. If successful, that too would cut CO₂ emissions.

And it is part of an alliance which believes hydrogen is a workable, economically-viable alternative to fossil fuels. All three projects are exciting and could pave the way for a brave, new world. ➤



1

CO₂ IS MIXED WITH WATER UNDERGROUND AND BECOMES TRAPPED IN THIS WATERY SOLUTION.

2

CO₂ IS TRAPPED IN THE MINERALS WITHIN THE RESERVOIR.

3

CO₂ IS STORED AS A LIQUID AND IN AN EASILY ACCESSIBLE PLACE, SHOULD THERE BE A MARKET NEED FOR IT.

INEOS EXPLORES WHETHER CO₂ CAN BE STORED IN OLD OIL FIELDS



INEOS has started to explore whether huge volumes of CO₂ could be stored in depleted oil fields as part of a plan that would slash greenhouse gas emissions.

It is currently testing whether the rock from one of its underground sandstone reservoirs in the North Sea is suitable to store carbon dioxide.

"We know that oil has been down there, and the seal can hold it," said Johan Byskov Svendsen, Business Development Manager at INEOS Oil & Gas Denmark.

"We also know how oil and water stream through the reservoir. That's how we also have a fair idea about how CO₂ will act underground."

The first results of INEOS Oil & Gas' tests should be known later this year.

Ultimately, the project – to capture and store carbon dioxide underground – could make the largest, single contribution to cutting Denmark's greenhouse gas emissions.

"No other company operating in Denmark has made it as far with a project like this as INEOS and its consortium partners," said Johan.

But there is still a long way to go and carbon capture and storage is still in its infancy.

One of the key challenges is securing investment to perfect the technology so that it can be widely used.

"By being innovative and joining the right partnerships, we strive to bring down the cost of storing CO₂," said Johan.

"Storing CO₂ is also a critical technology to meet the ambition for a zero emission economy in 2050. We can make a business and at the same time be an important player in the green transition."

Johan said governments needed to treat carbon capture and storage in a similar way to wind turbines about 40 years ago.

"When the wind industry was in its infancy, there was a significant amount of national funding, to secure innovative solutions and commercialisation," he said.

"That's where we are today. The CCS technologies are still immature and the investment is risky."

At its peak INEOS' Siri oil platform was producing 50,000 barrels of oil every day.

Now it is one of the four depleted res-



ervoirs that INEOS says could potentially be used for storing CO₂ – and, in turn, give those North Sea assets a second life.

Once the gas has been pumped underground, it would be stored in three ways.

Most would be stored as a liquid and in an easily accessible place, should there be a market need for it.

Another part would end up mixing with the water underground, and become trapped in this watery solution.

And the third way would involve trapping the CO₂ in the minerals of the reservoir.

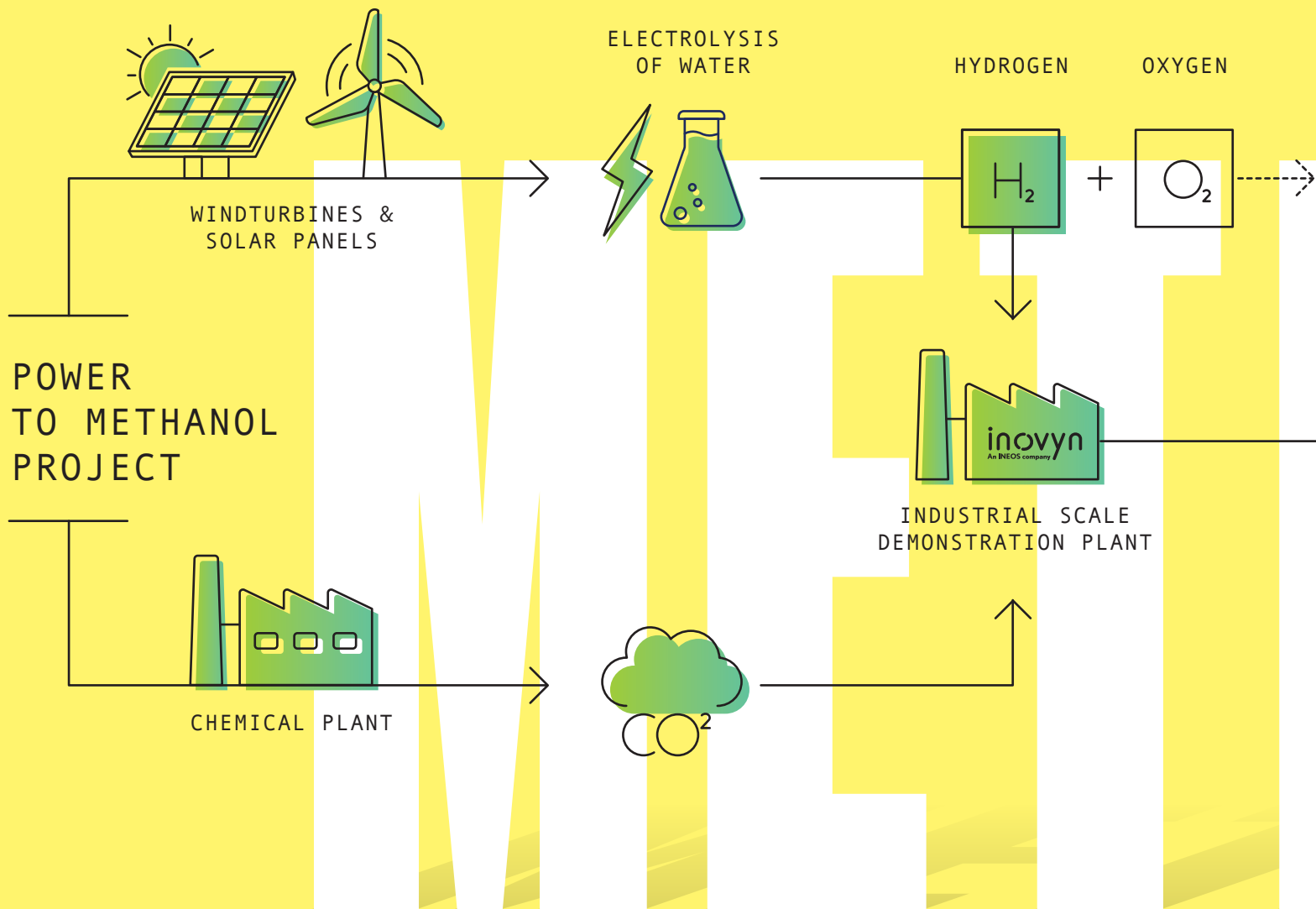
Denmark wants to lead the world on climate change – and politicians see carbon capture and storage as one of the best ways to achieve a green economy.

The Danish Council on Climate believes carbon capture could begin in 2025 and that storage could have a real influence in 2030.

"That's also our target," said Johan. "We're working from the assumption that it will be possible to store CO₂ from the second half of the '20s."

'Storing CO₂ is also a critical technology to meet the ambition for a zero emission economy in 2050'

**– Johan Byskov Svendsen,
Business Development Manager
at INEOS Oil & Gas Denmark**



Powerful consortium investigates plan to produce sustainable methanol and cut CO₂

UNWANTED, harmful CO₂ emissions could one day become a force for good.

Seven companies, including INOVYN, are currently investigating the possibility of mixing captured waste carbon dioxide with sustainably-generated hydrogen to produce methanol, a chemical widely used in everything from clothing to fuel.

It's an ambitious project and the industrial and business leaders have until next spring to prove it can be done. And done safely.

But if successful, an industrial-scale plant, capable of producing 8,000 tonnes of sustainable methanol a year, will be built at INOVYN's chemical manufacturing complex at Lillo.

"It would be a first for Belgium," said Dirk Dupon, Head of Strategy at INOVYN.

"In the Port of Antwerp, no methanol is currently being produced but vast quantities are being consumed in the chemical industry in Belgium, as well as blended in the fuel pool both in Antwerp and Rotterdam."

Each company involved in the 'Power to Methanol' feasibility study will draw upon its own expertise and experience.

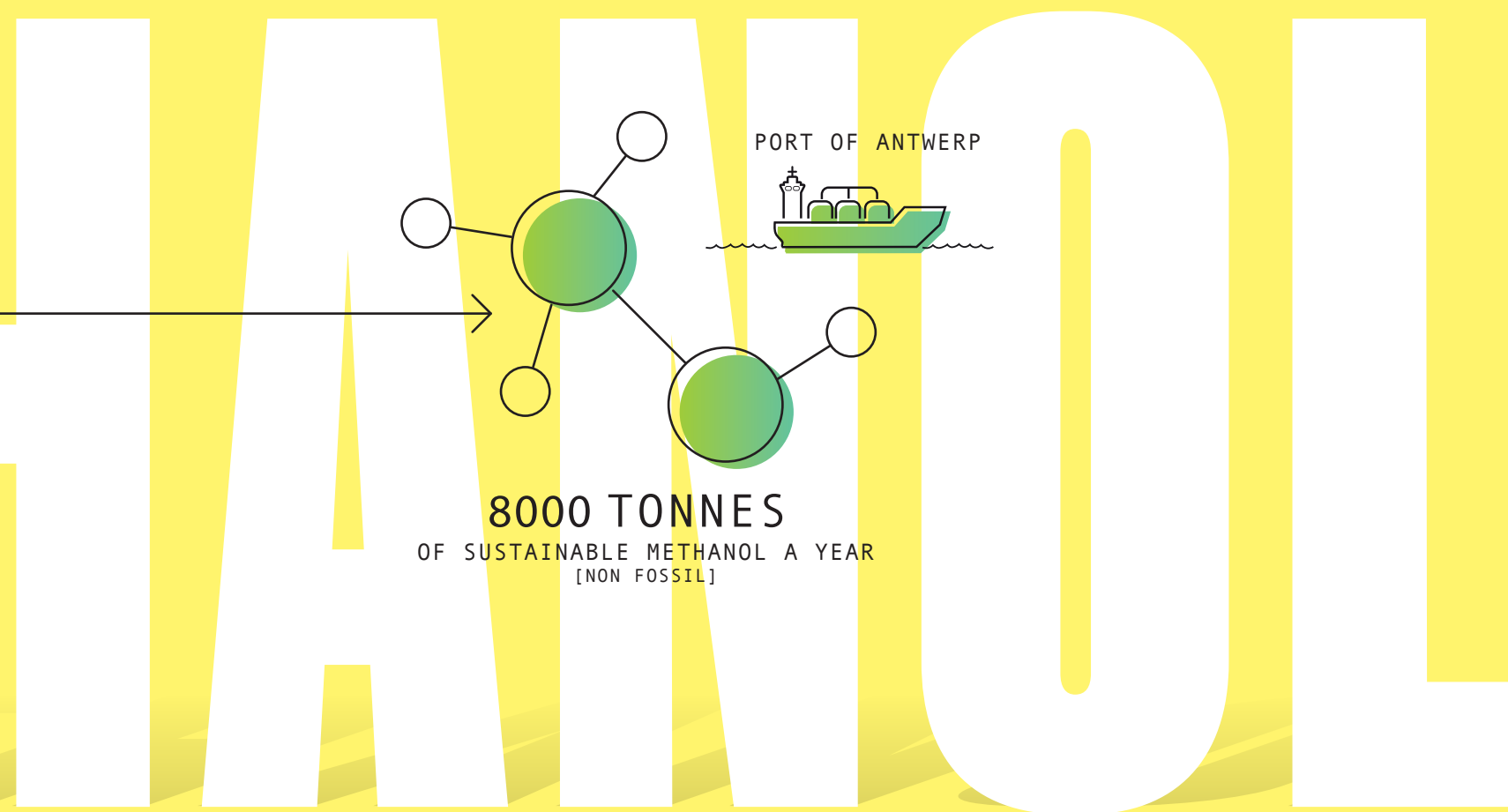
INEOS-owned INOVYN understands hydrogen production and salt electrolysis and will play a vital role.

"We will need to smoothly integrate two different operations," said Dirk.

But he is confident the project will work.

'It would be a first for Belgium'

**- Dirk Dupon,
Head of Strategy at INOVYN.**



“The pre-feasibility study convinced us this sustainability project can be successful,” he said. “Combining the expertise from the different consortium partners has further increased the likelihood of success. The consortium approach reduces the risk of doing such a project on our own.”

Methanol is currently produced using fossil-based raw materials and, in the process, gives off CO₂.

If the new process works well, each tonne of methanol produced would reduce CO₂ emissions by at least one tonne, per tonne of methanol.

Initially the methanol will be used by fuel and chemical companies in The Port of Antwerp, which handles about 235 million tonnes of international maritime

freight every year.

But future development could see it being used as a sustainable fuel to power marine vessels, such as tug boats, and road transport.

“It’s an excellent fit with our sustainability strategy,” said Dirk.

“We are always looking at pursuing options for alternative energy and the sustainable, lower carbon production of chemicals.”

Others involved in this complex and challenging project include ENGIE, Oiltanking, Port of Antwerp, Indaver and PMV.

ENGIE understands the electricity market, Oiltanking can offer advice on the logistical aspects of methanol production and storage, and Indaver will ad-

vise on the collection of CO₂.

“From our BIOVYN™ launch last year October, we know that there is a growing market for carbon neutral chemicals,” said Dirk.

BIOVYN™ is the latest generation of PVC and is made using a renewable biomass rather than purely gas and oil.

Flemish Minister Philippe Muyters said innovation was always the answer to challenges large and small.

“We won’t solve the climate problem by taxing entrepreneurs into the ground,” he said.

“This innovative project shows once again that our companies are very much part of the solution, especially when they come together and collaborate.” ●

1



HEATED HOMES



HGVs

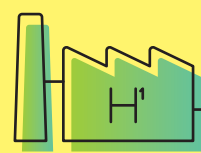


INDUSTRY

HYDROGEN ECONOMY



STORAGE



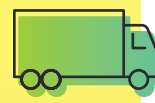
inovyn
An INEOS company



HEATED HOMES



BUSES



HGVs



TRAINS



PLANES



INDUSTRY

‘Hydrogen is the Heineken of fuels because of all the parts it reaches. We can use it to heat homes and power transport and industry’

– Chris Stark, CEO of The Committee on Climate Change

THIRTY-SIX people perished when the hydrogen-powered airship, The Hindenburg, burst into flames on May 6, 1937. But the loss of Germany’s 804ft-long luxury airship, which had revolutionised trans-Atlantic travel, did not just kill 13 passengers and 22 crew members that fateful evening. It also brought an end to the airship era and destroyed hydrogen’s reputation as a safe source of energy.

“There’s no doubt that hydrogen has got a PR problem because many still remember what happened to The Hindenburg,” said Chris Stark, CEO of The Committee on Climate Change.

“It’s got a bad safety record but it’s undeserved.” Hydrogen Europe is the European Hydrogen and Fuel Cell Association.

It says, in many cases, hydrogen is safer than the fuel we currently use to power our cars.

“Hydrogen is highly flammable but when hydrogen, as the lightest element in the world, leaks, it ascends rapidly into the atmosphere so it has less time to burn,” a spokesman said. “But carbon-based fuels tend to spread as liquids.” The association says hydrogen was wrongly blamed for The Hindenburg disaster.

“What happened was that an electrical discharge from the clouds, while docking during an electrical storm, ignited the skin of the airship,” the spokesman said.

“The hydrogen burned quickly and safely, above the occupants. It was the diesel fuel that burned for up to 10 hours after the airship caught fire.”

Chris believes it’s now time for governments – whose countries are all waking up after months of lockdown – to give hydrogen a chance and build a hydrogen-powered, low carbon economy.

“This cannot just be about restarting the economy,” he said. “This is an opportunity to reset it.”

In 2015 challenging climate change goals were agreed in Paris by 184 countries. “If we go back to growth based on using cheap fossil fuels, we will not meet those targets set by Paris,” he said. “And we will lock in a set of lifestyle choices that will ultimately be bad for the economy and bad for the environment.”

Chris is not blind, though, to the needs of the chemical industry and views it as part of the solution, not the problem.

“We will need fossil fuels in the future,” he said. “They will be part of the mix. But hydrogen is the missing part of the equation.”

In 2050, the committee wants a third of Britain’s energy to be provided by hydrogen – the equivalent to the amount of energy generated by electricity today.

“Hydrogen is the Heineken of fuels because of all the parts it reaches,” said Chris. “We can use it to heat homes and power transport and industry.”

|
2015

In 2015 challenging climate change goals were agreed in Paris by 184 countries.

|
2050

By 2050, the Hydrogen Europe committee wants a third of Britain’s energy to be provided by hydrogen – the equivalent to the amount of energy generated by electricity today.

What’s really refreshing is that the committee understands how INEOS can help to create an economy run on hydrogen. “INEOS will be with us on this journey,” he said. “It just needs to make sure it explains its role in the climate change debate so the public understands too.”

INEOS-owned INOVYN produces thousands of tonnes of hydrogen a year as a co-product, and INEOS sites in the UK, Germany and Belgium are all involved in hydrogen projects.

The company is also a member of the North West Hydrogen Alliance, which believes hydrogen is a workable, economically-viable alternative to fossil fuels.

INEOS is keen to invest in the infrastructure so hydrogen can be captured and stored but it needs to know there is a market for it.

The committee, which advises the government on what it needs to do to achieve its climate change goals, said government investment in companies like INEOS and the public’s buy-in were vital. “In the UK we already have the building blocks to do this,” he said. “But everyone will have a part to play in this. We need government to lead the way.”

Ironically COVID-19 may have given hydrogen – which produces zero emissions when used as a fuel in cars – a brighter future.

Nationwide lockdowns to stop the spread of COVID-19 have drastically reduced air pollution in many cities across the world.

Without cars on the streets, the smog has given way to clean air.

“We really are on the cusp of something really important and some interesting transport choices,” he said.

With social distancing, more and more people are being told to avoid public transport.

“If we go back to cars we are going to have very congested roads,” said Chris. “But if we start cycling and walking more and working remotely, we could make an enormous difference.”

What hydrogen lacks, he says, is a champion. “Unfortunately, we haven’t got a charismatic promoter of hydrogen,” he said.

Chris suspects most cars in the future will be electric, rather than driven by hydrogen, but he believes the opportunities for HGVs and buses and planes are enormous.

“Hydrogen looks increasingly like the best answer for HGVs,” he said.

Next year the UK will host the UN climate change conference and will be president of the G7 summit.

“We will need global co-operation and it will be interesting, post COVID-19, to see what happens then,” he said. “But I think the collective penny has dropped. Hydrogen is the most abundant element in the universe and we cannot achieve net zero emissions without it.” ●

THE HYDROGEN OLYMPICS

JAPAN HAD HOPED TO SHOWCASE
THE POWER OF HYDROGEN AT
TOKYO OLYMPICS



HYDROGEN-FUELLED CARS
TO FERRY AROUND STAFF,
VIPS AND ATHLETES

HYDROGEN
OLYMPIC TORCH



TOKYO



HYDROGEN POWERED
OLYMPIC VILLAGE

FUEL CELL BUSES TO SHUTTLE
ATHLETES AND VISITORS TO
VENUES AROUND THE CITY



H¹



JAPAN had intended to showcase hydrogen at this year's Tokyo Olympics. Organisers had planned to use it to power 100 fuel cell buses to shuttle athletes and visitors to venues around the city. Up to 500 of hydrogen-fuelled cars had been due to ferry around staff and VIPs and the thousands of athletes from around the world would have been living in a village, partly powered by hydrogen.

"With all the world watching the Games, Japan knew that this would have been a great opportunity to focus attention on hydrogen as a viable source of clean fuel," said Paul Humanic, a process manager at US-based energy company Nexceris.

Japan had also planned to use hydrogen to light the torch and the cauldron for the first time in Olympic history.

The Games may have been postponed this year due to the global pandemic but Japan is hoping it will have the chance to stage the most environmentally-friendly Games in history in 2021. "Japan wants hydrogen to be the legacy of its Olympics," said Paul.

Hydrogen has been used, for over 40 years, in vast quantities by industry in many parts of the world, and as a fuel for space exploration. Both have developed the infrastructure to produce, store and transport it safely.

It's the wider general public that needs to be convinced of its benefits.

"Many countries are now funding research into hydrogen generation through electrolysis so that hydrogen can be generated on site where it is needed, and can supplement the grid during peak times," said Paul.

But over the past decade, Japan – through necessity – has become one of the champions of hydrogen and fuel-cell technology.

After the 2011 Fukushima nuclear plant disaster, Japan shut down many of its nuclear power stations and switched to fossil fuels imported from abroad.

With little energy security and independence, it is little wonder that it is investing so heavily in creating a hydrogen-powered economy.

"Even if next year's Games are cancelled, Japan will most certainly continue down this road," said Paul. "It may be many years into the future before hydrogen is a viable energy alternative on a country-wide scale but Japan will continue working to commercialise hydrogen technologies and phase out fossil fuel and nuclear technologies."

Japanese car manufacturer Toyota, and a key sponsor of the Tokyo Olympics, believes that hydrogen represents the future of motoring.

Its car, Mirai, is the world's first, mass-produced hydrogen fuel cell vehicle. The hydrogen is stored in carbon fibre fuel tanks.

Oxygen from the outside enters through the Mirai's front air vent. The hydrogen and the air travel separately to the fuel stack where electricity is generated through a chemical reaction. Best of all, the only emission is water.

For now, though, Japan waits for news of

whether it can host next year's Olympics and show off what hydrogen can not only do for the economy, but also the huge difference it can make to the environment.

"We see these Games as a once-in-a-life-time opportunity to showcase on an unprecedented scale what the transition to a sustainable society can look like," said Mori Yoshiro, President of Tokyo 2020. ●



Colorful signs in Akihabara, Tokyo

"With all the world watching the Games, Japan knew that this would have been a great opportunity to focus attention on hydrogen as a viable source of clean fuel,"

– Paul Humanic, Process Manager at Nexceris



MIRAI

Japanese car manufacturer Toyota has built the world's first, mass-produced hydrogen fuel cell vehicle.



TOKYO 2020





F1 IS SAFELY BACK ON TRACK

INEOS HYGIENICS LAUNCHED AT BRITISH GRAND PRIX



Left: Celebration all round at the Spanish Grand Prix in Barcelona.

Below: INEOS Hygienics makes its debut along with a new look for the cars and team.



F

ormula One is back in the driving seat. And the best F1 team in the world, Mercedes-AMG Petronas, have started as they mean to go on – out in front.

Valtteri Bottas won the opening race at The Austrian Grand Prix, teammate Lewis Hamilton, who narrowly missed out on a place on the podium in the first race, won the second – and they showed no holding back in the following races.

The two drivers are racing in cars with a new colour scheme throughout this delayed 2020 F1 season to show their support against racism all forms of discrimination. They are also wearing black.

“We’ve always been clear that racism and any form of discrimination have no place in our team and in our society,” said a team spokesman.

At The British Grand Prix at Silverstone, a new name was added to their F1 cars – INEOS Hygienics.

The launch of the new business was announced at the event by INEOS, which is the

team’s Principal Partner.

The Hygienics business was created during the COVID-19 pandemic to supply thousands of hospitals with desperately-needed hand sanitiser.

Since then it has grown and is now supporting all INEOS’ elite sports teams – in motor racing, cycling, sailing and football.

“It is fantastic that we’re back racing and it’s only possible due to the stringent protocol measures that are in place across sport, including team members prioritising hygiene,” said Toto Wolff, Team Principal of Mercedes F1

“The INEOS Hygienics range of hospital grade sanitisers is helping to protect the team, and has given us the confidence to get the job done at the factory and on the track.”

Other elite performance sports teams using INEOS Hygienics products include Sir Ben Ainslie’s America’s Cup team, OGC Nice, and Sir Dave Brailsford’s newly-renamed Tour de France team, the INEOS Grenadiers.

“Hygiene is a top priority because it ensures we lose no training time or competition due to sickness,” said Sir Dave.

“It is fantastic that we’re back racing and it’s only possible due to the stringent protocol measures that are in place across sport, including team members prioritising hygiene,”

– Toto Wolff, Team Principal of Mercedes-AMG Petronas F1 Team



Staff can now train safely



Mafic have adapted their technology to suit Sir Ben Ainslie's team



INEOS TEAM UK, Britain's challenger for sailing's coveted America's Cup, is now in New Zealand after one of the best summers of sailing ever as a team in the UK. The team have now finished sailing in the UK. The first AC75, Britannia I, is on her way on a ship, and Britannia II has now been flown to Auckland on an Antonov cargo plane.

The COVID pandemic has thrown a number of challenges the team's way over the past six months. "It forced the team to slow down and think about its priorities," said skipper Sir Ben Ainslie. "In particular how to make the most of the time we had before the 36th America's Cup." From May through to August, however, the team had a brilliant sailing period.

"Getting out on the water regularly has been so valuable because the learning curve on these brand new AC75 boats is so steep that every time they sail, we learnt a huge amount," said Ben. To achieve as many sailing hours as possible meant keeping the team fit and healthy. Britannia had to be modified so that the team could train safely while complying with the rules around social distancing to avoid the transmission of COVID-19.

An electric grinder did the work of two men so that the team could cut down on the numbers on board. But that wasn't all. The team – on and off shore – wore Henri-Lloyd face masks, used INEOS hand sanitisers, and were fitted with devices that monitored where they were at all times.

"We could monitor our personnel, look at our practices and make changes to ensure everyone was as safe as possible," said Ben. The Safeguard devices, developed by Mafic, are part of INEOS TEAM UK'S new ZERO COVID Days strategy which focuses on hygiene at home and at work. "Mafic adapted their technology and devices to our working environment within a matter of weeks," said Ben.

The devices were worn on the team's arms, inside their pockets or hard hats. "From the movement of someone's head we can understand what that person is doing, whether it is welding, grinding, or operating machinery, and we can know their exact location," said CEO Will Woodhead. "That gave us a second-by-second position, which we could then use to map any social distancing breaches." Those breaches can then be reviewed and assessed to understand where improvements can be made. Mafic was founded with

the mission of making workplaces safer. "I'd seen accidents happen too many times," said Will. Ben described the devices as a game changer for the team. "It has been a difficult time but very productive time for the team," he said. The team has worked well on the water and on the drawing board.

INEOS TEAM UK and team software design partner Coderus have also developed new software that can take a design, add it to a model of the whole boat and then test it to see whether design change will make the boat faster or not. If it's faster, Chimera can then prepare the model for a full simulation run across many different boat designs. Chief designer Nick Holroyd said ideas could be tested quickly and accurately – and encouraged rather than limited innovation. "The America's Cup has always been a design and technology contest as much as a sailboat race," he said. "So this is even more important, given the rules have banned testing in wind tunnels and towing tanks."

Teams have also been banned from sailing more than one boat at a time. "In doing so they have banned all the normal 'real', as opposed to virtual, methods of development," said Nick. "The previous gold standard of development, two-boat testing, is no longer possible." But Coderus CEO Mark Thomas was not fazed. "The system improves efficiencies and capabilities and allows the team to be able to push the boundaries even more," he said. The team will be on the water in Auckland in their new AC75, Britannia II, in October.

"That will give us a two-month period of productive sailing before we head into the Christmas regatta, which will be the first time all these teams have lined up together," said Ben. "It will be a fascinating period. Given this is such a new class of boat, there may well be some big differences between the teams." INEOS TEAM UK cannot wait to set sail in the Waitemata Harbour. Beautiful as New Zealand is, they know that they are there for only one reason – to win the America's Cup for Britain.

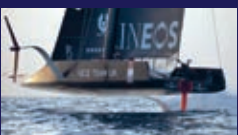
FLYING HIGH: PAGE 28

The team can understand what someone is doing just from the movement of someone's head

The data can be analysed quickly and accurately



The devices can be worn on someone's arm, inside a pocket or a hard hat



T R A C K

A N D

R A C E

SAFETY COMES FIRST AS INEOS' CHALLENGERS GET BACK TO WORK

Discover more: [INEOSTEAMUK.COM](https://www.ineosteamuk.com)

HIGH FLIERS

TEAM'S PRECIOUS CARGO TRANSPORTED TO NEW ZEALAND IN HUGE UKRAINIAN PLANE

BRITANNIA II has been built to fly. But on September 28, 2020, it wasn't the might of skipper Sir Ben Ainslie's men lifting the 75ft race boat out of the water during a training run for next year's America's Cup challenge.

This time, it was the job of a 33-year-old Ukrainian cargo plane to fly the team's second race boat, RB2, to the starting line in New Zealand.

"This was a real milestone moment for us," said Grant Simmer, CEO of INEOS TEAM UK. "We are on the home stretch now."

Britannia II had been helped on to the Antonov cargo plane for the start of its four-day, 12,200-mile journey to New Zealand by The Grenadier, INEOS' purpose-built 4 x 4.

Grant was full of praise for project director Dave Endean and his team for building the boat and safely transporting it from the team's UK HQ in Portsmouth via truck to on to New Zealand via plane – and all on schedule.

"It's been an incredible effort from the entire team," said Grant. "We are all very proud to have been able to get this boat built on time while navigating our way through COVID re-strictions."

The 24-hour flight from Stansted Airport in the UK had included two stopovers in Dubai and Indonesia.

After the boat landed at Auckland Airport on October 1, the team's second race boat was taken by road to their newly-constructed base on Wynyard Point to be finished and commissioned.

"RB2 is a huge development on our first boat," said Grant.

Dave said it had been a huge operation.

"The logistics of moving an entire America's Cup team, including two AC75 boats, to New Zealand are not insignificant and it has taken a lot of time and hard work to make it happen," he said.

The fruits of their labours will hopefully be borne next year when Britannia II takes to the water to win The America's Cup.

As far as INEOS TEAM UK is concerned, there is no second. ●



THE GRENADIER HELPS BRITANNIA II ABOARD THE 33-YEAR-OLD UKRAINIAN CARGO PLANE FOR THE START OF THE BOAT'S 12,200-MILE JOURNEY TO NEW ZEALAND





“It’s been an incredible effort from the entire team. We are all very proud to have been able to get this boat built on time while navigating our way through COVID restrictions.”

– Grant Simmer, CEO of INEOS Team UK



The Grass Professor

INEOS Football invests in three new pitches to help OGC Nice raise its game in training



SCOTT BROOKS
British groundsman known as The Grass Professor.



OGC NICE
Responsable des Terrains.



THE FOOTBALL ASSOCIATION
SGP Head Groundsman.



ARSENAL F.C.
Senior Groundsmen.



TOTTENHAM HOTSPUR F.C.
Groundsman.

ONE of the oldest football clubs in French history has rebuilt its three pitches from scratch with the help of a British groundsman known as The Grass Professor.

Scott Brooks, who has worked at the national centre of the English Football Association, arrived at OGC Nice in January with high expectations for himself and also the club, which finished fifth in Ligue 1 last season.

"The grass was not very healthy at all," he said. "And two of the three pitches couldn't meet the performance level that I felt was required for a professional athlete."

By performance level, Scott means a pitch that allows players to train and play without getting injured.

"A poor pitch is probably more than half of the reason why a player would get injured," he said. "And the injury rates here were very high."

Today all three pitches have been replaced with surfaces that allow the club's talented players to train harder, for longer.

"We should now start seeing fewer injuries and fitter, healthier players," he said. "Players need to come off the pitch tired after giving it everything, but without any pain."

In doing so, OGC, which was founded in 1904, has also become the first French club to use a hybrid pitch - part synthetic, part real grass.

The grass is built on a layer of gravel and two layers of sand, each one levelled with a laser.

The top level of fine sand is mixed with an organic product that is derived from animal dung to provide the grass with the nutrients it needs to grow.

It is also the first French club to adopt a new, more efficient watering system, which uses 30% less water.

"They use the system to water melons in Brail which has a similar, dry

climate, so I am hoping it will work well here," he said.

What Scott had discovered on his arrival at OGC Nice was a very basic irrigation system fed from the mountains.

"It doesn't rain very often here but when it does, we get a month's rain in a day," he said.

Today, holding water tanks have been installed.

"If there is a problem with water in the city, we will have enough water stored on site to keep the pitches alive," he said.

That matters in a part of the world where growing grass isn't easy.

"I actually think the South of France is one of the most difficult climates for growing grass because we never really have perfect weather for a prolonged period," he said.

"The pitches might be very, very good in April or May, or again in October, but they're not perfect every month for the season. My biggest challenge is creating a pitch that's good for every month of the season."

Scott has also increased the pressure of the water so that it covers the whole surface of the pitch evenly.

"I can put the sprinklers on just five minutes before training and everything will be perfect," he said.

In the past, the pitch needed to be watered for about 45 minutes before the players came out and often during training.

Bob Ratcliffe, CEO of club owners INEOS Football, described Scott as meticulous, dedicated and determined. "He has a wealth of expertise which should help the team at OGC Nice," he said. And that's Scott's goal too.

"If you think the team performed very well this season, just think what they can now do next season," he said.

OGC Nice is one of the founding members of the French football league and has four league titles to its name. But the club's last cup triumph was in 1997.

Patrick Vieira, who has played for Juventus, Inter Milan, Manchester City and Arsenal, is head coach.

Scott said Patrick, who is considered one of the best players of his generation, would also struggle to achieve results on a poor pitch.

"The pitch is critical if you want a player to achieve his potential," he said. "A good quality can give a player the confidence to try new things in training."

Today there is very little difference between the training ground and the pitch inside the stadium at Allianz Riviera. And that's how it should be, says Scott.

"Consistency is key in the pitches that you train on and the pitches that you play on," he said. "That's the whole point of home advantage. If you train on the pitch all week and you go and play on the same pitch at Allianz Riviera, then you'll adapt very quickly and your performance level will be higher.

"If you trained here on a very good pitch and then went to a stadium and the pitch wasn't at the level of the training pitch, then it takes you 10, 15 minutes to adapt to it and that could be the difference between winning a game and losing the game." ●

FUN FACT:
The new pitches use a polymer structure which is made from INEOS Polypropylene.

A soccer ball with white and dark purple panels sits on a green grass field. The background is a bright, hazy sky with a sun flare on the right side.

Football kicks off again

INEOS' two top football teams are now back in action. But for now, FC Lausanne-Sport and OGC Nice are playing all their matches behind closed doors due to COVID-19.

"We have missed being on the pitch so it's brilliant to be playing again," said OGC Nice coach Patrick Vieira.


"But we do feel that lack of atmosphere. It's tough to play in these conditions."

Later this year FC Lausanne-Sport, one of the oldest football clubs in the world, will move from its home of 66 years to a new 12,000-seater stadium.

INEOS Football, which bought the Swiss club in 2017, said it had created an exciting atmosphere for both players and fans.

The Tuiliere complex boasts nine pitches – two grass and seven synthetic.

These extra pitches provide training and match facilities not only for Lausanne Sport, but also for other local Lausanne teams.



INEOS GRENADIERS LOOK TO THE FUTURE

THE INEOS Grenadiers may have missed out on victory in this year's Tour de France. But the riders, who had become accustomed to winning, continued to show incredible grit and determination after team leader and defending champion Egan Bernal was forced to abandon the race after 16 stages.

"They immediately went on the offensive," said Team Principal Sir Dave Brailsford. That persistence ultimately paid off with an emotional victory on stage 18 as Michal Kwiatkowski and Richard Carapaz took a 1-2 finish.

But sadly, this year, it was not meant to be, with the glory going to Slovenian Tadej Pogacar (UAE Team Emirates) instead.

"The Grenadiers will be back to target that yellow jersey again in 2021," he said.

Dave, whose team have won seven of the past eight Tours, went on to praise Egan Bernal who became the first Columbian to ever win the race last year.

"In victory and defeat he showed us what a true champion looks like," he said. "He is determined to come back even stronger in 2021."

Team INEOS had been renamed The INEOS Grenadiers at the start of the Tour following the unveiling



of INEOS' no-frills, unbreakable 4 x 4, The Grenadier.

The team's four Grand Tour winning champions, Chris Froome, Geraint Thomas, Egan Bernal and Richard Carapaz, unveiled the new team kit from Castelli and newly-branded Pinarello DOGMA F12 at the Allianz Riviera, alongside two prototypes of the Grenadier vehicle which gives the team its new name.

The Grenadier is the rugged 4 x 4 utility vehicle engineered and manufactured by INEOS Automotive, designed on purpose to be a highly capable, go-anywhere, hard-working vehicle.

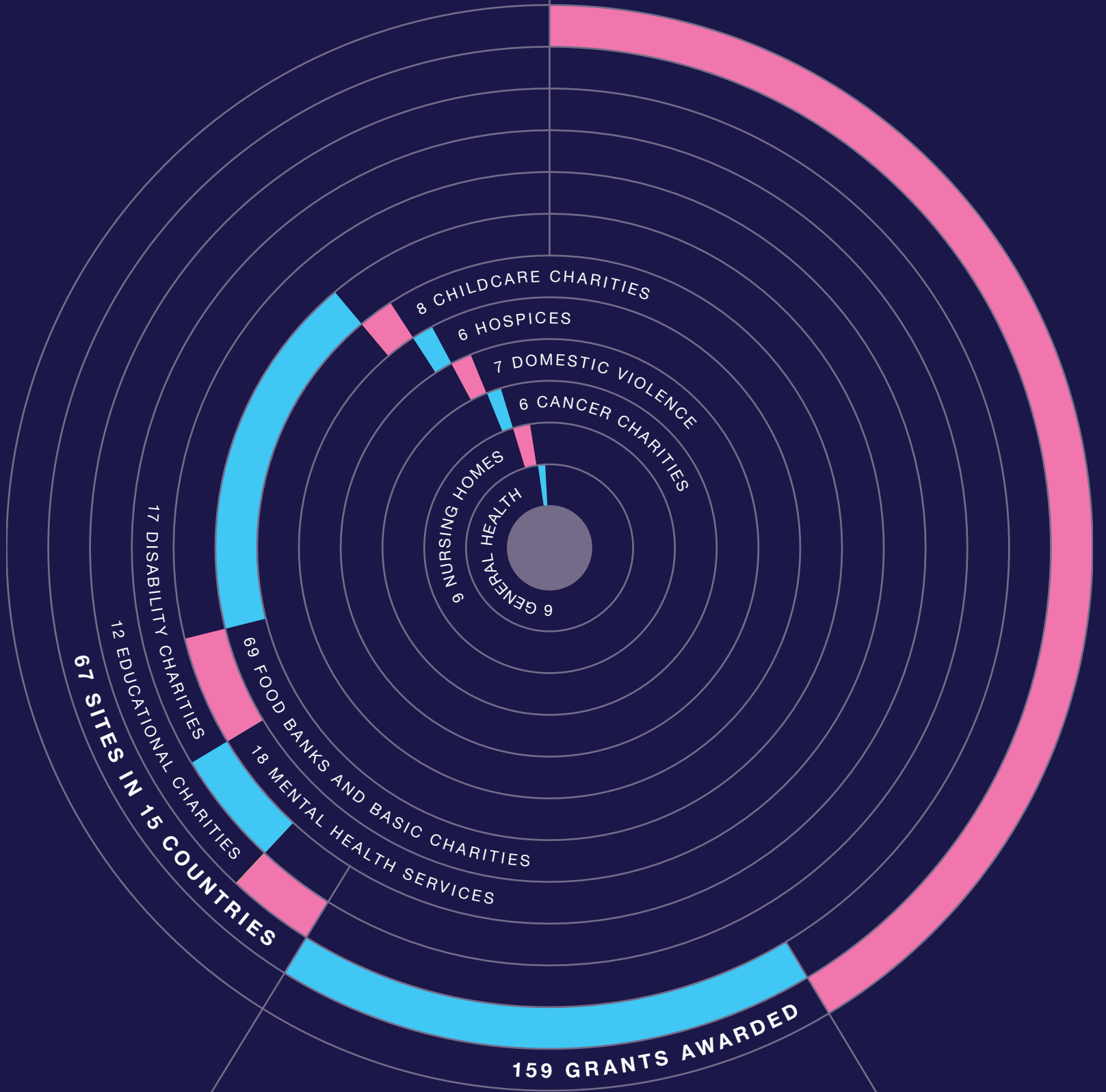
"The INEOS Grenadiers is a new name but one that sums up who we have always been," said Sir Dave. "It is a new partnership but one that epitomises our existing team values – ambition, grit, determination, resourcefulness, tenacity and passion."

He added: "This is a deepening of our relationship with INEOS and a brilliant example of how being a part of the INEOS group presents so many opportunities for us to be greater together.

"Just like the Grenadier, we are a team built on purpose. We know what we need to do and have the right team to get the job done.

We are here with a clear ambition and are going all in to make it happen." ●

£1MILLION
COVID-19
COMMUNITY
FUND



Nominations from 67
INEOS sites in
15 Countries

159 organisations
helped

INEOS' LIFELINE TO CHARITIES

159 ORGANISATIONS BENEFIT FROM INEOS' £1MILLION COVID-19 COMMUNITY FUND

SMALL charities, supporting those hardest hit by the global pandemic, have recently been thrown a lifeline by INEOS.

Over the past few months, employees at INEOS' sites across the world have been tasked with finding out which local charities and community groups near them are most in need of emergency funding.

"Often a small donation can make a huge difference to these organisations, which are doing vital work in our communities," said Ursula Heath, who has been co-ordinating the INEOS Community Fund. "So we decided to create a £1 million charitable support fund, administered through several targeted grants of up to £10,000, to organisations where this would allow."

As INCH went to press, 159 organisations in 15 countries, including the UK, America, Italy, France, Germany, Spain, Sweden, Belgium, Norway, Singapore, China and Canada had all been helped following requests from 67 INEOS sites.

"We were overwhelmed by the enthusiastic response of our employees and the volume and quality of grant applications," said Ursula. The £1m international INEOS Community Fund was established by INEOS owners Sir Jim Ratcliffe, Andy Currie and John Reece as the world began to lock down in response to COVID-19.

Among those to benefit have been food banks, care homes, domestic violence shelters and poorer families needing help to pay their basic bills.

One food bank charity – the Restos Du Coeur branch based near Tavaux in France – said its charitable donations had fallen from €8,000 in March 2019 to just €80 in March 2020.

"We are delighted to be able to help them," said Thibault Pagnot, Communications manager at INOVYN at Tavaux. The Food Bank in Singapore was given £10,000 by INEOS Styrolution to support its 'Feed the City – Takeaway' scheme.

"We have seen a surge of people in need with a daily request of more than 12,000 cooked meals," said Ms

Nichol Ng, co-founder of The Food Bank Singapore which sources its food from local restaurants. For Steve Harrington, President Global Styrene Monomer and Asia-Pacific, that was also important.

"We are not only providing some relief to the communities who are struggling, but we are also providing some support to the local businesses who are at risk of shutting permanently," he said.

And at INEOS Composites' site in Dublin, Ohio, officer manager Susan Drye said INEOS' \$10,000 would allow the Mid-Ohio Food Bank to provide \$90,000 worth of food for the community.

"This has been very much appreciated by our communities," said Susan.

Other causes supported by the fund have included elderly and disabled care homes, mental health support lines, and organisations providing educational materials to disadvantaged children so that they could continue learning with schools closed. ▶

£1MILLION
COVID-19
COMMUNITY FUND

Charity offers hope of a better life for single parent families

MOTHER SETON HOUSING

America

mothersetonhouse.com

SINGLE parents, who desperately need the time and the courage to change their lives for the better, have found a friend in INEOS. But Deanna Frey, who runs the charity Mother Seton Housing, says INEOS' decision to help financially means so much more than that.

"What it has done more than anything is to show them that someone believes in their future," she said. "It would not have mattered if they gave us just \$1." Seton House provides single mothers – and fathers – with more than just a home.

"That's what it was in the early days," said executive director Deanna. "But we realised we needed to do more to break the cycle of poverty by providing hope, resources and a plan." An INEOS Community Fund donation of £5,000, organised by INEOS' WL Plastics Mills Production Facility in Wyoming, USA, has helped them to speed up the launch of a new course that seeks to understand what every parent wants to achieve in their work and personal life, what's stopping them and, more importantly, what they need to do to make it happen.

"We want to provide hope, and INEOS giving us this money will help us to do it sooner," she said. "There is no way we could have got this far without INEOS' help." Seton House will use the curriculum developed by Kansas City's Connections to Success, which has helped to create a more vibrant and inclusive economy.

Lessons learned in Kansas City will help Seton House in Casper, Wyoming,

enormously – even though the two cities are radically different. The thinking is that fundamentally people's basic needs don't change.

Seton House is not just talking to its residents about they want. It also visits local employers to ask them what skills they are looking for in potential staff. The three-week course will explore all aspects of life, including relationships, education, health and parenting. The hope is that the course will allow residents to become more independent and take back control over their own lives. But the support does not end when the course ends.

"We tell them that we will always be here for them," said Deanna. "If they need mentors, we are here." Most of those who seek Seton House's help are homeless, single-parent families. "They may have been staying with friends," said Deanna. "But we have also had people living in cars with their children." Many may also have suffered physical or mental abuse. "They are at rock bottom when they come to us," said Deanna. Shanell Mullen was one of them. She was homeless, jobless, pregnant and had a 10-year-old daughter when she sought help.

"They believed in me when I didn't believe in myself," she said. Today, she no longer lives at Seton House. She has a full-time job, a car and lives in a three-bedroomed apartment with her three children, having regained custody of her second son. "I have hope, goals and dreams," she said. "I see a future."

When the charity was founded 31

years ago by Brother Raymond Phillips, there were just three apartments. Single parents were allowed to stay for just 30 days. "It was later extended to 90 days but it just wasn't enough time to help them," said Deanna.

Today the charity, which relies almost entirely on the public's generosity, offers homes to 30 single-parent families for two years. But the charity's support does not end after two years thanks to a unique partnership with a local housing association to provide rentable homes.

"What's wonderful is that our families are accepted for who they are," said Deanna. "Many are those we help may have been told that they are stupid and won't amount to anything. By INEOS helping us, they are also telling our residents that they are worth it." For Michelle Xikes, a single mother who works at INEOS-owned WL Plastics, that matters enormously. She first heard about Seton House in 1997 when she left a potentially physically abusive relationship.

"I was pregnant at the time," she said. "Luckily I never had to go there as a resident but I knew how important it was." Over the years, she thought about what she could do to help. She had recently started donating items and then heard about the planned course.

"Seton House relies on donations which have been badly affected by COVID-19," she said. "When I heard that INEOS was asking for nominations for a grant, it was perfect timing. The grant will ensure the mentor programme gets started." ➤



"We want to provide hope, and INEOS giving us this money will help us to do it sooner"

– Deanna Frey, executive director,
Mother Seton Housing

Care homes' call for help answered

THE ROTARY CLUB OF SARREGUEMINES
France
rotary-club-sarreguemines.org

AS the COVID-19 crisis swept through France, staff at INEOS Polymers in Sarralbe were keen to help.

"We rapidly knew the needs in our region were huge," said Georges Scherrer, who works at the site.

Hospitals were desperately short of PPE for doctors, nurses, midwives, radiologists.

But it wasn't just hospitals. Care homes were struggling to get hold of PPE too to protect themselves – and their residents – against the virus.

"Mortality rates in care homes had increased by 30% in parts of our region," said Georges.

Nursing homes especially needed facemasks that met World Health Organisation specifications but they weren't cheap.

As soon as the INEOS Community Fund was launched, the team at Sarralbe had a charity in mind to support.

The Rotary Club of Sarreguemines, which was co-ordinating the relief effort, were invited to make an application, and the INEOS Community Fund responded with a €10,000 donation.

"The only protection these homes had were the visors the rotary club had already distributed to them," said Georges.

Since then, INEOS has also donated thousands of bottles of INEOS hand sanitiser to places where it was needed.

"We now see some children going to school with our hand gels," he said.



"We rapidly knew the needs in our region were huge"

– Georges Scherrer

Food bank serves over 520K meals

RESTOS DU COEUR
France
restosducoeur.org

A FOOD bank charity is counting its blessings after the INEOS Community Fund came to its aid. The Restos du Cœur for the Jura area had feared it might struggle to feed people after it managed to raise just €80 in charitable donations in March 2020 compared to €8,000 in March 2019.

"The constraints of the lockdown due to COVID-19 meant we just couldn't raise any more money," said Georges Leneez, Président of The Restos du Cœur for the Jura area in France.

But the need for food was still there. Sébastien Demontrond, a shift manager at INOVYN Tavaux site, had previously worked for the charity as a volunteer – and was aware that the charity would logistically struggle to meet the growing number of people in need.

He suggested, to his management, that an INEOS Community Fund grant could help to pay for a refrigerated truck,

which would allow fresh food to be delivered. A €10,000 grant was approved and quickly paid.

Marc Hanquet, Opérations Manager at Tavaux, said the site, as the largest private employer in the area, knew it could make the difference.

"We were aware that many people could be economically impacted because of COVID-19 so they too would be relying on the charity," he said.

Last year The Restos du Cœur's 462 volunteers served more than 520,000 meals to 4,320 people; this year it is expected to be much higher.

It is not the first time, though, that INOVYN has helped the local community to cope with the effects of COVID-19.

"We have donated face masks, bleach solution specially made by INOVYN Tavaux, and INEOS hand gel to local medical staff, but it makes us especially proud to do more," said Marc. ➤



"The constraints of the lockdown due to COVID-19 meant we just couldn't raise any more money"

– Georges Leneez, Président of The Restos du Cœur for the Jura area in France

£1MILLION
COVID-19
COMMUNITY FUND

INEOS helps to feed city's poorest people

LIGHT OF LIFE MINISTRIES

America

lightoflife.org



“The coronavirus pandemic created unprecedented challenges for everyone, we saw a 35% increase in demand for meals. Each day, we were serving approximately 400 meals to the community.”

– Doug Smith, Light of Life Ministries
director of development

A CHARITY struggling to feed hundreds of homeless and poor people in Pittsburgh, America, built a make-shift restaurant with the help of the INEOS Community Fund. Light of Life Ministries erected a 40ft by 40ft tent – and also extended meal times – so that it had enough room for people to eat their breakfast, lunch and dinner while keeping their distance from others.

“We took every precaution to keep people safe,” said Doug Smith, the charity’s director of development. Demand for the charity’s help had increased because so many other services in the city were closed.

“We knew that if we were not here, those in need did not have an option,” said Doug. “Many of the people had encountered addiction, abuse and mental illness. We were here to help those who lives literally hang in the balance.”

But the charity, which also operates a food bank and an emergency shelter where men can shower and sleep, took safety precautions.

It bought disposable cutlery, latex gloves, portion-sized condiments to reduce handling and cross-contamination and basic cleaning materials.

It also rented portable hand washing stations and ensured that the dining areas were thoroughly cleaned after each shift. “The coronavirus pandemic created unprecedented challenges for everyone,” said Doug.

“We saw a 35% increase in demand for meals. Each day, we were serving ap-

proximately 400 meals to the community.” Demand for the charity’s food bank had also increased greatly.

“At one stage about 40 community organisations were coming to us to get food for the hundreds of men, women, and families that they serve,” he said.

In April alone, the charity gave away 50,000lbs (22,600kgs) of food. Food was also distributed to those living in high-rise flats or who were unable to leave their homes due to COVID-19 symptoms.

Its emergency shelter for men remained open throughout the pandemic – and was full every night. Vitamin C-supplemented electrolyte drinks were offered to boost their immune systems – and they were provided with a portable potty.

“Many people would not have thought how the closure of all public toilets would affect those living on the streets,” said Doug. All this, though, cost money.

And it was money the charity did not have. To help ease that burden, INEOS Composites on Neville Island co-ordinated a \$10,000 donation through the INEOS Community Fund.

“We thought about Light of Life as a potential grant recipient immediately during the pandemic,” said Melissa Morgan, a material handler at the site.

“They aim to meet the needs of the most vulnerable every day and additional COVID-19 precautions have certainly made it more challenging.”

The charity said it would do whatever was needed to help those most in need. “We believe this is going to be our finest hour at the mission,” said Doug. ➤

Helping hand for children with cancer

ONCOLOGY PHYSIOTHERAPIST Germany

THE INEOS Community Fund has offered to pay the lion's share of a physiotherapist's salary so she can continue to help children with cancer.

Over the past three years, parents, doctors and friends have raised about £15,000 a year to ensure she can regularly visit the children on the paediatric oncology ward in Mannheim, Germany.

"She motivates the sick children to get out of their beds to do playful activities," said Dr Gregor von Komorowski, CEO of The German Leukaemia Research Aid Campaign for Children with Cancer.

"These exercises help the children to fight against their illness and reduce the

side-effects of chemotherapy."

But COVID-19 has taken its toll on fund-raising, and cut her funding. "The pandemic has affected our work substantially," said Dr Komorowski.

To help with the charity's challenges, the local INEOS Styrolution in Ludwigshafen worked with them to apply to the INEOS Community Fund for a grant.

The INEOS Community Fund offered €10,000 towards the physiotherapist's salary – and will also contribute towards new furniture in the children's playroom. "We are so grateful to INEOS," said Dr Komorowski.

The charity group was founded in

1979 by parents whose children had cancer. "Throughout all these years, our aims have remained the same," he said. "We want to support research and help families cope but our work is exclusively financed through donations."

Manuela Bleiziffer, from INEOS Styrolution who helped to apply for the grants, said she felt incredibly proud of her employer. "In times of crisis, it is easy to forget how well you are doing when your family and friends are healthy and you have work yourself," she said.

"But INEOS hasn't. It is actively working to help organisations that are struggling to survive." >



"She motivates the sick children to get out of their beds to do playful activities"

– Dr Gregor von Komorowski, CEO of The German Leukaemia Research Aid Campaign for Children with Cancer

Together until death do part

WINCHESTER HOSPICE CHARITY United Kingdom winchesterhospice.com

THE INEOS Lyndhurst site has donated £15,200 through the INEOS Community Fund to buy a specialist double, hospital bed that will allow loved ones in hospice care to spend their final nights together.

It has given Winchester Hospice Charity in the UK the money to provide what is known as a "cuddle bed" – a standard-sized hospital ward bed that

can be transformed into a double bed at the touch of a button. "It will make such a difference to so many families," said clinical matron Maddy Thomson.

"And it's lovely to have such positive news in the current climate." The bed, which was bought with a grant from INEOS' £1 million community fund, is currently at Royal Hampshire County Hospital in Winchester.

But it will be transferred to the new 10-bed Winchester Hospice when the two-storey Burrell House is fully restored next spring. "We greatly appreciate INEOS' support," said Malcolm Ace, Chief Financial Officer at Hampshire Hospitals NHS Foundation Trust.

The importance of cuddle beds emerged in June when a couple, who had been married for 75 years, were being

treated at separate hospitals and facing death apart. "They both needed end of life care but the family could not visit either of them because of very restricted visiting due to COVID-19," said a spokesman for The Countess of Brecknock Hospice in Andover, Hampshire. The hospice, though, was able to transfer them both to Brecknock where they are now being cared for in a spacious room with a cuddle bed. ●



HAND SANITISER – 500ML

HAND SANITISER



250ML



100ML



50ML

The sanitiser will be sold in 50ml, 100ml and 250ml and 500ml bottles.

DISINFECTANT SPRAYS



250ML



100ML

Choice of three. One will be small enough to carry around in a handbag so it can be used to disinfect, for example, a mobile phone.

There is also a 500ml Sanitiser Spray for Surfaces

ANTISEPTIC WIPES



1 WIPE



10 WIPES

Wet wipes will be sold in packs of 10, 30 and 50. The pack of 50 will be Hospital grade for medical surfaces



30 WIPES



30 WIPES

• 75% PHARMA GRADE ALCOHOL

• HOSPITAL GRADE

KILLS 99.9% OF VIRUSES AND BACTERIA

BIRTH OF A NEW BUSINESS

AFTER supplying millions of bottles to thousands of hospitals free of charge through the spring and summer, INEOS is shifting its focus. As economies try to get back on track, businesses try to reopen and people try to get back to normal, INEOS is to supply its new hospital grade hand sanitiser product range to the public through Amazon, supermarkets, pharmacies and shops.

It is the first time in the company's history that INEOS has sold its products directly to the public. It's a crowded marketplace already but INEOS Hygienics is confident it can make an impact with its no-frills, high purity hand sanitisers, sanitiser wipes, and sprays.

"There will be many people outside the industry who have never heard of us so that will be a challenge," said chief operating officer George Ratcliffe.

"But INEOS does not want its packaging to be fluffy. It essentially says 'we are here to do a job and we will do it'."

INEOS says its hand sanitisers and sanitiser wipes are superior because they contain 75% high purity, hospital-grade synthetic ethanol – a proven and effective virus-killer. "We are making hand sanitiser because INEOS is the world's largest producer of high purity synthetic ethanol which adheres to EU pharmacopeia standards," he said.

INEOS manufactures Isopropyl Alcohol (IPA), the other active ingredient commonly used in sanitiser products. INEOS' aim is to build a brand that the public trusts and associates with quality. For the past 20 years, INEOS has supplied the products to manufacturers for materials that are used to make everything from iPads, to pharmaceuticals, to cars to clothing.

But few have perhaps been unaware of INEOS' role in the manufacturing process. COVID-19, however, changed that and highlighted the chemical industry's vital role in helping the world to defeat this unseen enemy.

As the distress call went out to industry to help slow the spread of COVID-19, INEOS responded by ramping up production to meet the unprecedented global demand for chemicals at its sites.

It built six new manufacturing plants – one in the UK, two in France, one in Germany and two in the USA – each taking under 10 days to build from scratch to help tackle

'We will supply hospital-grade sanitiser products to the public. We can make the best quality wipes, sprays and hand sanitiser because INEOS manufactures 100% of the pharmaceutical grade ethanol in Europe'

– **George Ratcliffe, Chief Operating Officer**

the global shortage of hand sanitiser.

Each plant was designed to produce one million bottles of hand sanitiser every month – and all of it was being delivered free to hospitals where it was needed the most. The majority were 50ml bottles which nurses and doctors could keep in their pockets.

In all, INEOS gave away millions of bottles of hand sanitiser to thousands of hospitals in the UK, Germany and France and the USA – all produced to World Health Organisation specifications.

One of two French plants has increased capacity and all production has moved from the Lavera sanitiser plant to Etain.

"At the time we established the Lavera plant, France had a huge problem with COVID-19 and especially in the South," said George. "It was one of the hotspots."

The plant was set up solely to manufacture hand sanitiser on an industrial scale for two months for hospitals. "It was a charitable effort by INEOS because we had the resources," said George. In the US, INEOS Hygienics worked with Health-

INEOS thrives on making decisions quickly. But one made in March, to tackle the critical shortage of hand sanitiser to hospitals and the NHS in the UK, has led to the birth of another INEOS business – INEOS Hygienics

care Ready to identify the American hot-spot hospitals that had the greatest need.

"What was incredible about this donation was that it was not just a stop-gap or short-term solution," said Programme Director Sarah Baker.

"INEOS set them up permanently, which meant they weren't worried about where the next round of hand sanitiser was going to come from when they showed up for work."

George said the beauty about the new business was that it meant people in Europe could now rely on a secure supply from the UK, Germany or France to meet their needs rather than China or Turkey.

"COVID-19 has made everyone more aware of the importance of hygiene and the need for effective sanitising products," he said. "INEOS Hygienics is determined to ensure our products are available to meet the increased demand around the world." ●

**for more information visit:
www.ineoshygenics.com**

HAND SANITISER DISPENSERS



INEOS HAS DESIGNED TWO TYPES OF SANITISER DISPENSER - ONE FOR THE HOME AND ONE FOR BUSINESSES AND SHOPS.

THE ALTERNATIVE TOUR DE FRANCE CHALLENGE

INEOS likes a challenge and its people often go that extra mile, both for themselves and others.

So running a cycling challenge is always going to be a winner. For the third year INEOS had taken on its own Tour De France Challenge. As the main tour hurtled across France, 1870 INEOS employees from around the world, organised into 85 teams from across 73 sites, matched every kilometre every day for three weeks.

Many of the teams completed the challenge many times over. Adding all the teams' kilometres together, the INEOS Tour de France Challenge covered a staggering 1,090,577 km. Here are some of the statistics:

