

# Plugged **in**

Spring 2018

to Hinkley Point C



## Reactor one takes shape



Read all about  
reactor one's  
progress on  
page 4

→ Read Director Rob Jordan's  
Welcome on *page 2*

→ How we are inspiring the  
next generation on *page 7*





# Director's welcome

Latest updates on the Hinkley Point C project and our continued work within the community from our site construction director.



Welcome to the Spring edition of Plugged in; it's full of news about what is happening on the Hinkley Point C project. My top priority continues to be safety, with constant reminders to our workforce of the risks on-site and how they should avoid them.

Activity is ramping up with over 3,000 people now on-site. We have already excavated 4.5 million cubic metres of rock and earth, most of which is now in the Holford valley, avoiding the need to remove off site and limiting traffic on the local roads. We are now starting on the deepdig prior to

the tunnel boring machines beginning their work later this year; learn more on pages 10 and 11.

Work on the network of underground galleries that will hold all the pipework and electrical cabling is coming along well and over 100,000 tonnes of concrete has already been poured. The third of four concrete batching plants is currently being commissioned.

The pre-stressing gallery (featured and explained on page 4) surrounding the base of reactor one is well on track, as are the

foundations for the 760 m long sea wall and the jetty, which is due to be completed in the autumn.

Over 10,000 people have now registered with the Hinkley Jobs Service Talent Pool, putting them first in line for support, guidance, vacancies and exclusive careers fairs. We have helped to create around 200 apprentices on the project to date and work continues to alert local suppliers to the contracts that support everything from precision engineering to clearing mud from the footpaths.

The park & ride at Junction 23 is now complete and forms part of my strategy to continually bear down on anti social fly parkers. The new traffic lights on the M5 roundabout are also complete and will help to control traffic flow, particularly our HGVs, in the years ahead. I am very aware that the temporary increase in the number of HGVs, until the Jetty is ready, is not welcome and I would like to close by taking the opportunity to thank local people for their patience and forbearance as we deliver the necessary material to this massive national infrastructure project.

**Rob Jordan**  
**Site Construction Director**  
**Hinkley Point C**

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### Getting in touch with us

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- Email** [hinkley-enquiries@edf-energy.com](mailto:hinkley-enquiries@edf-energy.com)
- Call us** 0800 096 9650
- Visit us** EDF Energy Visitor Centre, Angel Place Shopping Centre, Bridgwater, TA6 3TQ
- Tweet us** @edfehinkleyc **Instagram** @hinkleypointc
- Billing enquires and customer services** 0800 096 9000



# Achievements for the Hinkley Point C project (so far...)

**First nuclear safety concrete in a generation poured on site**

**Jetty construction takes shape**

**Workforce grows to 3,000**

**Rock armour is delivered to site**

**Sedgemoor Campus receives the first accommodation modules**

**£3.76 million awarded from the Community Fund**

**Wylds Road / The Drove works are complete**

**Sea wall construction starts**



# Reactor one takes shape

Now, in 2018 the team start construction on the pre-stressing gallery and nuclear island foundation or common raft. These are two key elements of the final nuclear power station structure.

## What is the nuclear island common raft?

The nuclear island common raft is the foundation where the reactor will be positioned. This is a supporting structure that will be hidden underground, unseen until decommissioning.

## What is the pre-stressing gallery?

The pre-stressing gallery is a safety related structure located underneath the nuclear island and will contain the stressing cables, ensuring the incredible strength and security of the structure. It will be a circular-shaped concrete box underneath the nuclear island common raft.

## What is a pre-stressing cable?

The pre-stressing cables are embedded in the pre-stressing gallery and throughout the outer containment building of the reactor. These cables are tightened to form high compression, strengthening the overall reactor structure. The strength of the outer containment building is highly important for the safety of the power station throughout its operation.

## What will these two elements do?

The nuclear island common raft and the pre-stressing gallery will form the foundation of reactor one and the building above. They are an incredibly important step in the creation of the first UK nuclear power station in over 25 years.

## How many nuclear islands will be at Hinkley Point C?

There will be two nuclear islands in total, one for each of the reactors. There will also be two conventional islands, which will form the foundation for the two turbine halls.



# Junction 23 upgrades

A new Hinkley Point C park and ride has been officially opened at Dunball Roundabout.

As part of a wider £20 million investment into the local travel infrastructure, M5 junction 23 park and ride has opened. This accompanies, a park and ride and freight management facility at Junction 24 and other park and rides near Williton and Cannington.

The Junction 23 park and ride has parking for up to 1,500 vehicles allowing workers to travel to and from the Hinkley Point C site by bus.

The Junction 23 park and ride was constructed by Costain and completed on time and on budget.

The facility can also handle up to 85 HGVs, enabling smaller loads to be bulked into larger single loads to reduce the number of lorries delivering to the site.

Somerset County Council's Deputy Leader, Councillor David Hall, who helped to officially open the new facility, said, 'We are pleased to see the opening of the park and ride facility at J23, a purpose-built facility for EDF Energy workers travelling from the north of the district. As we continue to invest in a growing Bridgwater, we also recognise this growth means more road users.

This facility will help to reduce peak-time journeys across the town. We are working hard with EDF Energy and other developers to improve our road infrastructure wherever possible for the benefit of all our communities and businesses. Facilities such as this park and ride are extremely helpful in managing capacity'.

**Below** Councillor David Hall and the construction team open Junction 23 park and ride

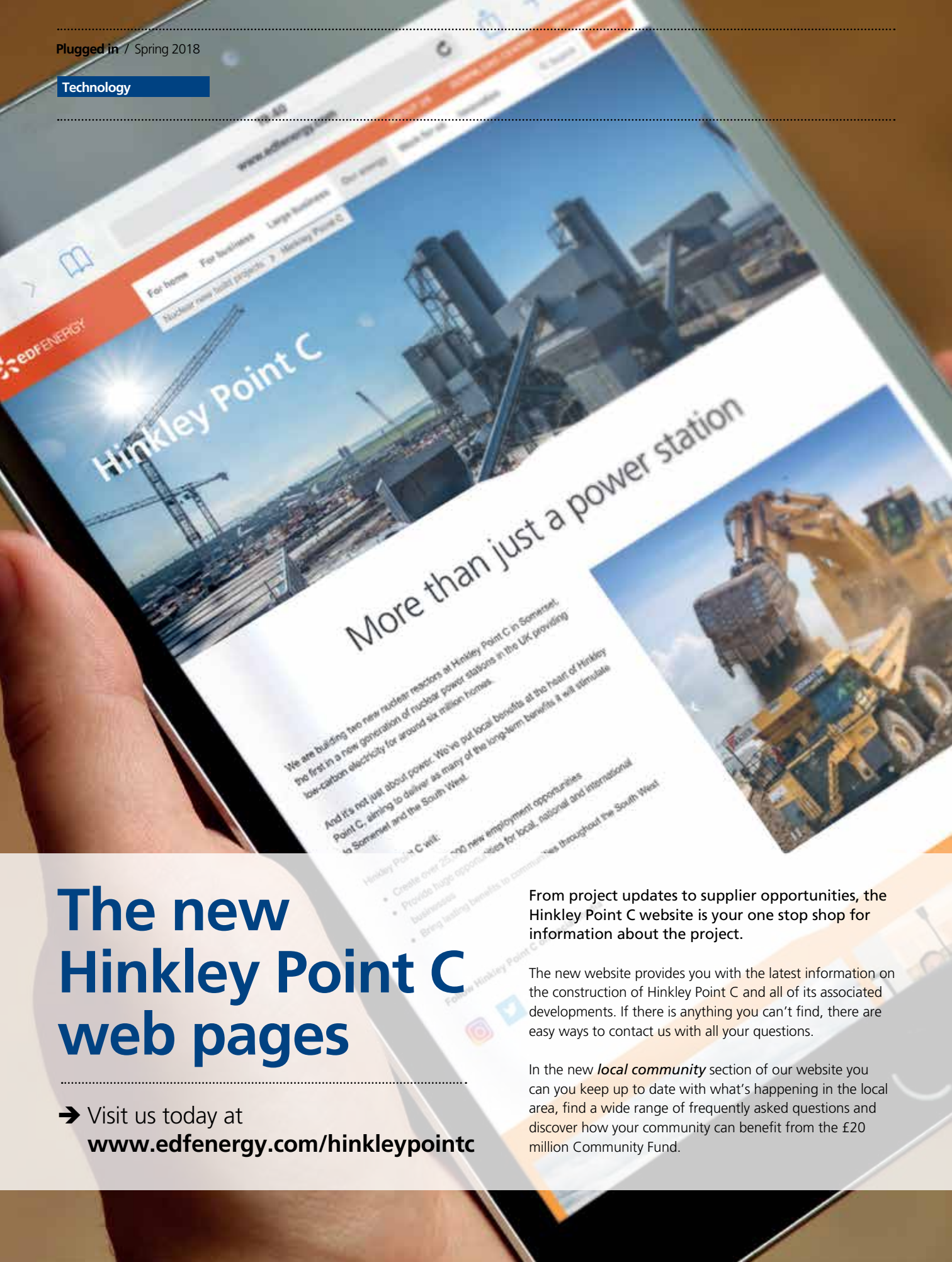
## Further improvements at Junction 23

Work has recently been completed to signalise the M5 roundabout at Junction 23.

This work has been carried out as a long-term project to manage the increasing traffic coming to Bridgwater as a result of, not just Hinkley Point C, but also of other projects planned for the years to come. The new lights are being closely monitored to optimise the performance of the junction.







# The new Hinkley Point C web pages

➔ Visit us today at [www.edfenergy.com/hinkleypointc](http://www.edfenergy.com/hinkleypointc)

From project updates to supplier opportunities, the Hinkley Point C website is your one stop shop for information about the project.

The new website provides you with the latest information on the construction of Hinkley Point C and all of its associated developments. If there is anything you can't find, there are easy ways to contact us with all your questions.

In the new *local community* section of our website you can keep up to date with what's happening in the local area, find a wide range of frequently asked questions and discover how your community can benefit from the £20 million Community Fund.

## Inspiring the next generation

Kier BAM recently hosted 24 students from three local schools (Bridgwater College Academy, Taunton Academy and West Somerset College) at Hinkley Point C to give them a taster of life as a civil engineer.

As part of the afternoon the group learnt about bridge design and construction. They were then challenged to create a bridge, out of limited materials, that would take at least 100 grams of weight.

“Can I really seriously get a job here doing something like that?”

Civil engineers from across the Kier BAM team volunteered their time to provide the students with face-to-face interaction with engineering experts, who could offer advice and guidance. By the end of the challenge some impressively strong bridges had been created, with the winning bridge taking the weight of more than three tape measures, over the 100g target!

Upon leaving the site, one of the students asked: “Can I really seriously get a job here doing something like that?” This enthusiasm shows the impact programmes such as Inspire and Young HPC can have on the futures of young people.



### Supporting you from school to work

#### Who we are

If you are aged 16–21, the Young HPC programme has been designed to give you access to a range of resources that will help you take steps towards your dream career. If you don't know what your dream career is yet, take the opportunity to find out what makes you tick and get suggestions of roles that could suit you.

#### How to get involved

To register, please visit [www.edfenergy.com/younghpc](http://www.edfenergy.com/younghpc) and fill in the online registration form.



1



2



# Introducing Host and workforce accommodation



Host will run the two accommodation campuses for the Hinkley Point C workforce, located in Bridgwater and at Hinkley Point C.

Host is a joint venture of four Somerset companies created to bring together the best qualified local key partners, with specific skills, to deliver the ideal accommodation management for the Hinkley Point C workforce. It's members have more than 60 years of first class international and domestic hotel and leisure experience.

There will be 340 full-time staff positions available with Host, the majority of whom will be recruited locally. For information on joining the team, please contact the Hinkley Point C Job Service: email [hinkley-jobs@edf-energy.com](mailto:hinkley-jobs@edf-energy.com) or call 0800 029 4289

➔ Hinkley Campus  
due to open Summer 2018

## Hinkley Campus

<b>x 510</b> en-suite bedrooms	<b>x 15</b> accommodation buildings	<b>x 4</b> communal areas	<b>x 1</b> gymnasium	<b>Sports facilities</b>

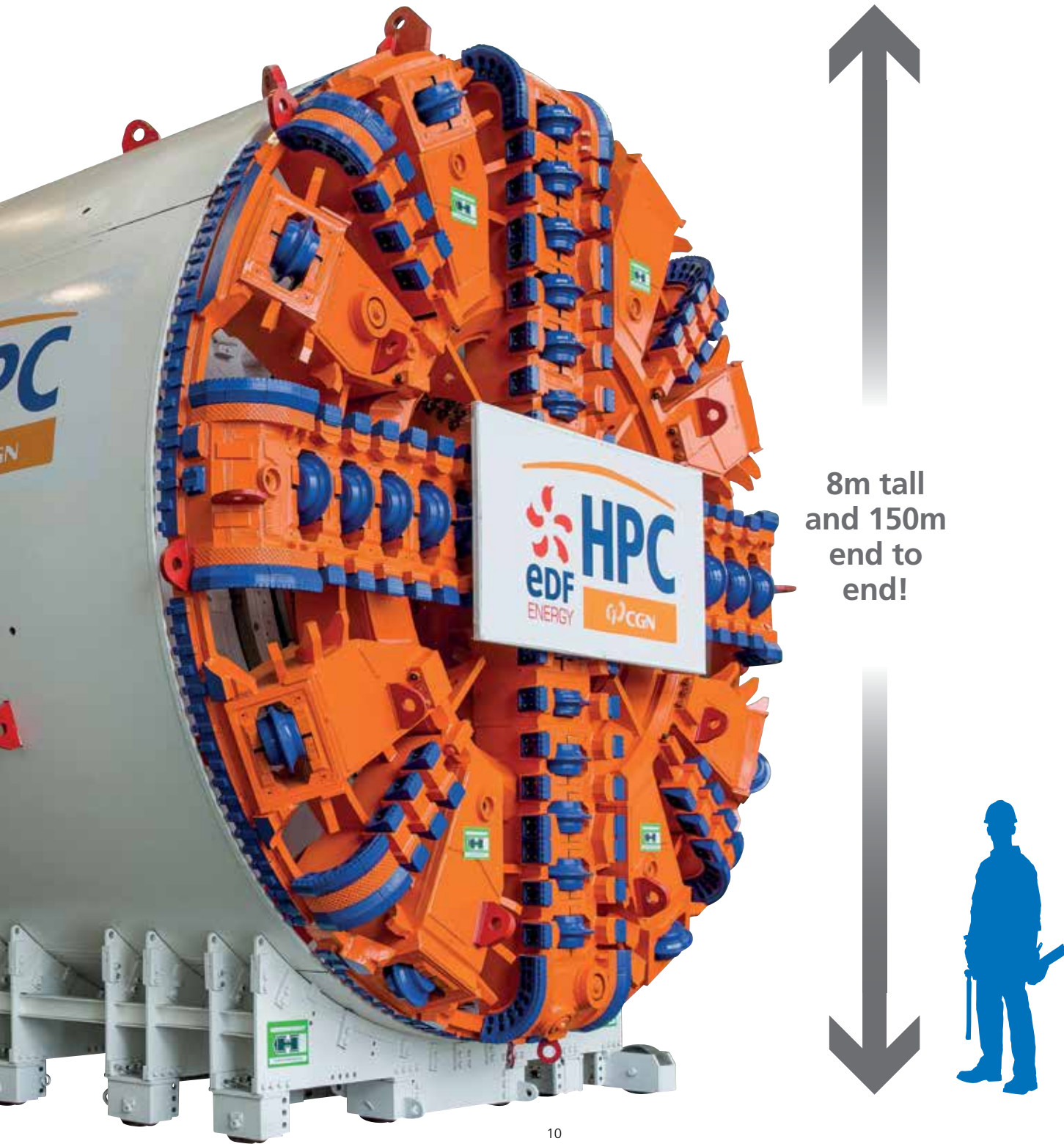
## Sedgemoor Campus

<b>x 986</b> en-suite bedrooms	<b>x 29</b> accommodation buildings	<b>x 4</b> communal areas	<b>x 1</b> gymnasium
<b>Sports facilities</b>			

➔ Sedgemoor Campus  
phase one due to open Autumn 2018



# Anything but boring



Later this year Hinkley Point C will begin its tunnelling operations underneath the Bristol Channel. **Thomas Barrett** is the construction delivery lead for tunnelling at Hinkley Point C.

**Q: What is your role in the tunnelling team?**

A: I am currently the construction delivery lead supervising the works carried out on-site. I ensure that the highest quality and safety standards are maintained, as well as managing the programme and cost of the works.

**Q: Where has your career taken you so far?**

A: The UK, of course, Namibia, Ireland, Malaysia and Hong Kong. Tunnelling works in London included the North London and Bankside to Farringdon Cable Tunnels for National Grid and EDF respectively, and the High Speed 1 tunnels under the River Thames. I have been lucky in that my career has been varied, with the overseas work providing a different perspective on communication and management style.

**Q: I hear that the patron saint of tunnelling is St Barbara; what involvement does this have in the tunnelling process?**

A: Tradition has it that St Barbara is the patron saint of those who work underground, which includes tunnellers among many others. It is customary to have a blessing ceremony with an icon of St Barbara placed at the tunnel entrance, after which the tunnelling work usually commences. A further tradition is that all tunnel boring machines are given female names.

**Q: How do you get such huge machines into the ground to start tunnelling under the sea bed?**

A: The machines will come to site in a number of large pieces and will be assembled on a launch platform at the bottom of the pre-excavated shafts. The largest piece weighs approximately 95 tonnes; the cutter head. Once the cutter head has excavated 1.5m of tunnel, a concrete ring is built, made up of concrete segments, these form the tunnel lining. This happens over and over again until the tunnel reaches its end point.

**Q: How do you get the machines back out from under the Bristol Channel?**

A: We don't on this project. Interestingly, on my last nine tunnel boring machine jobs we haven't retrieved any of them. Because we will be tunnelling out under the sea, no recovery portal or shaft will be constructed. Smaller parts of the machines can be removed, but the tunnel boring machine body and cutter head



are larger than the circumference of the constructed tunnel and therefore will remain. There is a machine burial report which is developed in association with relevant stakeholders, including the local authorities, which has to be approved before tunnelling can begin.

**Q: How many workers will be in the tunnels?**

A: There will be people working full-time inside the tunnels to operate the machine and to construct the segmental lining. There will be approximately 15-20 at a time in the tunnel, with a wider surface and office support team for logistics and design, etc.

Towards the end of the longest tunnel, it can take up to 45 minutes to walk to the machine. The further you get, the further you have to walk.

**Q: What would you say are the biggest challenges for the tunnelling team?**

A: Naturally, shift patterns can have an effect on miners, including the lack of exposure to sunlight which can cause vitamin D deficiency. We are working closely with Hinkley Health to make sure the miners have the support they require.

**Q: So what's next?**

A: We are currently prepping areas on-site to receive the components of the first tunnel boring machine in the summer. The naming ceremonies with winning local primary schools will then take place towards the end of the year.





# National College for Nuclear

Bridgwater & Taunton College has taken its place as a central provider of nuclear skills and training. The College has become a hub of the National College for Nuclear, which opened its doors this February ready to support Britain’s next generation of nuclear technicians and engineers.

Together with Lakes College, the Cumbrian hub, Bridgwater and Taunton College will home state-of-the-art facilities that include virtual, simulated laboratories. The college will help thousands of young people and other learners gain the knowledge and

skills they need to work in the growing nuclear sector, which provides vital low-carbon power to businesses across the country.

The facility is one of five National Colleges being established by government, as part of its Industrial Strategy developing technical talent. It provides industry with a skilled workforce, across a range of sectors support the country’s long-term economic growth.

**Right** Barbara Jones, Head of HR for Hinkley Point C, opens the college



# Hinkley Point C’s armed forces covenant pledge

## What it is

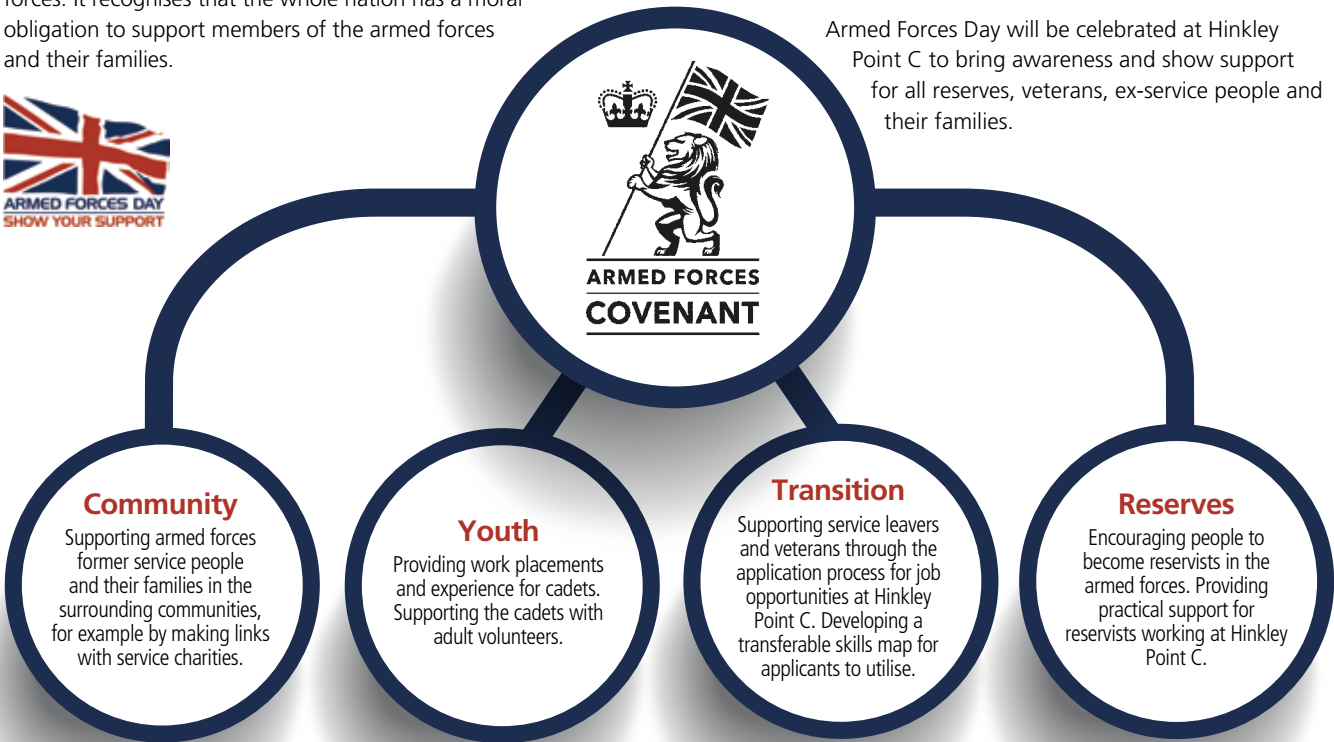
An Armed Forces Covenant (AFC) is a promise that sets out the relationship between the nation, the government and the armed forces. It recognises that the whole nation has a moral obligation to support members of the armed forces and their families.



## Hinkley Point C’s involvement

Hinkley Point C signed its AFC in 2016 and has four areas of focus that support both the project and those linked to the military.

Armed Forces Day will be celebrated at Hinkley Point C to bring awareness and show support for all reserves, veterans, ex-service people and their families.



# Bridgwater's first STEM Festival



Primary school pupils get hands on to learn all things STEM.

On the 5 and 6 of December 2017 EDF Energy held the first Bridgwater STEM Festival.

Hosted at Bridgwater and Taunton College, 658 pupils from 14 Somerset primary schools had the opportunity to get hands on at a variety of stands to



learn about science, technology, engineering and maths (STEM).

Pupils learnt how to make their own lip balm, tried on protective clothing, and found out how to illuminate a light bulb. They also got the opportunity to ask experts all their questions. STEMworks and Chemlabs also attended the event, giving live demonstrations of scientific explosions and robotics.

The event included 32 EDF Energy volunteers from across Hinkley Point C and Hinkley Point B, all of whom were inspired by the enthusiasm and excitement shown by young people.

The incredible success of this event has led to a second event being held later this year.

**Left** Pupils enjoying the practical activities at the festival





# Supply chain apprentice – Gemma Howell

Gemma Howell is a Year 2 supply chain apprentice at Hinkley Point C; here she shares her story of joining the project and how she is taking every opportunity...



**Hello, I'm Gemma Howell. I joined the company 16 months ago as a supply chain apprentice and have enjoyed every minute.**

My first involvement with EDF Energy was seven years ago in a Year 9 assembly. I can remember it as clear as today. It was before construction had begun and a team of EDF ambassadors came to my school in Minehead to deliver a presentation. It seemed to me like another world; to me the industry was fascinating.

It was the first time such an idea had been presented to me in such an accessible manner and that was it: I wanted a career in science.

I wanted to get out there and learn about life in the real world, so at the last minute I withdrew my application for university and began looking into higher apprenticeship schemes. The more I researched ,the more I liked the idea of combining traditional qualifications with the practical work. The idea of earning money instead of taking a student loan seemed an obvious choice and so I applied for the supply chain apprenticeship scheme with EDF Energy.

Joining EDF Energy to become part of Hinkley Point C was a fantastic opportunity, one that I am ever so grateful for. I'm currently

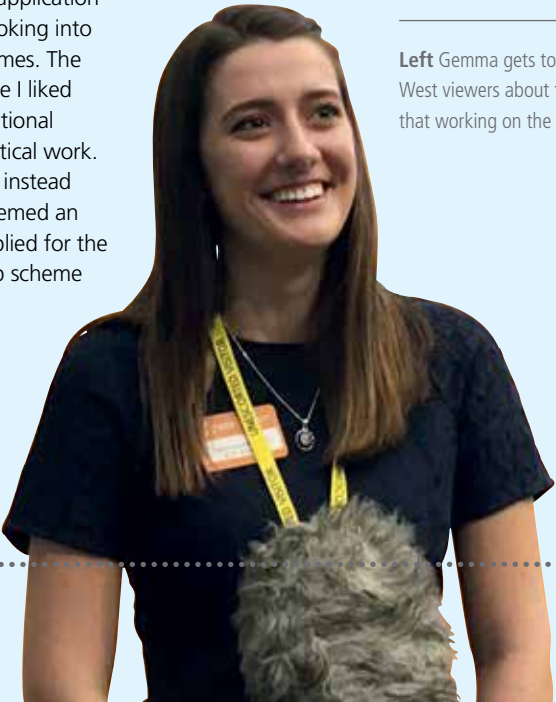
studying for my Higher National Certificate in construction and will hopefully go on to complete a bachelor's degree in commercial management and quantity surveying.

I'm also still learning the practical skills associated with industry and managing contracts. This experience has created a real foundation for me to launch my career.

To me,Hinkley Point C is about so much more than "turning the lights on." It's about bringing hope and opportunity to an area that is often deprived of such things. It's about making a difference in the local communities, whether it's encouraging young people to pursue a career in science or creating opportunities for local businesses.

I feel privileged to be part of this project,

to contribute to such a significant part of the UK's infrastructure, but more importantly, to help give back to an area that has given me so much.



Left Gemma gets to tell BBC Points West viewers about the opportunities that working on the project can bring



# Supply Chain Conference

On 14 March, EDF Energy staged an event in the Houses of Parliament to celebrate Hinkley Point C supply chain.

Hinkley Point C is made possible only by the hard work and expertise of the companies that provide the skills and materials needed to deliver one of the largest infrastructure projects in Europe.

The event gave companies the opportunity to meet Lords and Members of Parliament to explain the role they play in delivering the project.

A number of them also showcased their contribution with exhibition stands.

Simone Rossi, EDF Energy's CEO, attended the event – kindly hosted by local site MP Ian Liddell-Grainger – to highlight the contribution made by south west and UK companies in delivering the project.

Ahead of the event, Simone Rossi said: "This event will recognise the extraordinary work being done by the companies across the UK to deliver Hinkley Point C. Together, they form the world-class supply chain that is needed to deliver this project to the highest possible standards of quality and reliability."



## Locally led joint ventures at Hinkley Point C

Here are a few of our trusted suppliers...



**HOST ACCOMMODATION MANAGEMENT**



**Somerset Passenger Solutions BUSSING**



**FACE REPROGRAPHICS, PRINT, DESIGN & STATIONERY**



**Somerset Infrastructure Alliance SITE INFRASTRUCTURE SERVICES**



**Somerset Larder CATERING**



**COMA CONSTRUCTION UTILITIES**



**TCi BUILDING FIT-OUTS**





# Photography competition winner



And the winner is... **Gail Pitter from Exeter.**

This photo was taken in Lyme Regis, Dorset, with a Sony a230 camera.

### **Are you a budding photographer or a photography enthusiast?**

Share your photographs taken in and around Somerset with us and in each edition we will publish our favourite. Send your high-resolution photo to: [hinkley-enquiries@edf-energy.com](mailto:hinkley-enquiries@edf-energy.com), with your name and details of where the photograph was taken and what camera you used to capture the shot. The winner will receive a £50 photography voucher. Our next closing date is 30 May 2018.

Terms and conditions apply:

[www.edfenergy.com/content/plugged-photography-competition](http://www.edfenergy.com/content/plugged-photography-competition)