

An aerial photograph of a coastal industrial facility, likely a power plant or refinery, featuring a large complex of grey buildings and a prominent spherical storage tank. The facility is situated on a narrow strip of land between a sandy beach and the sea. The background consists of a vast, patchwork landscape of green and brown agricultural fields separated by hedgerows.

PA Consulting

Gus Hochschild

WEF 18th May 2022

- **PA delivers end-to-end innovation**

GROWTH & INNOVATION

Apply agility and design thinking to work at speed; transform propositions, experiences and processes; engage consumers and customers; focus on outcomes

TECHNOLOGY

Fully exploit physical and digital technology, and data, as a source for innovation and improvement and as a driver to attain sustainability

DESIGN

Create product concepts, propositions and experiences that engage and delight consumers; and that win in the market

COMMERCIAL STRATEGY

Support clients to find solutions that work - in practice, not just on paper - and that capture and drive significant long-term value



c. 3,300

Experts



19

Offices globally



\$755m

Generated fee income (2020)



Clients

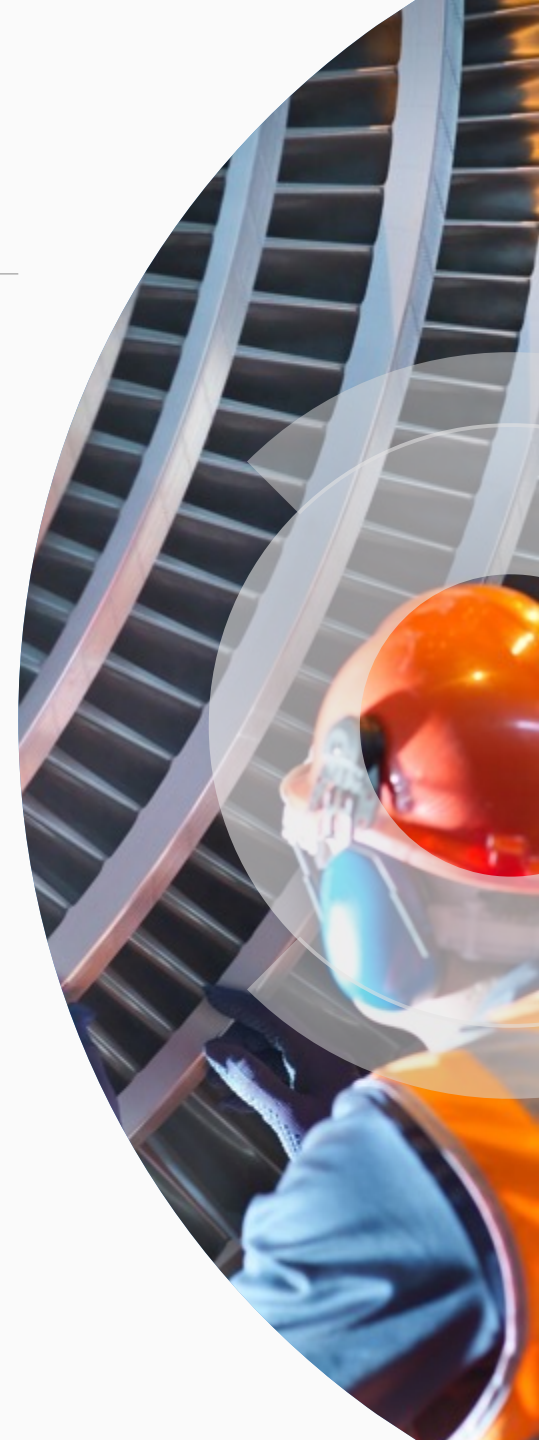
Mix of major
global/regional brands
and start-ups



Expertise

Deep expertise in
Energy, Transport and Defence
sectors

**Bringing
Ingenuity
to Life**



Highlights of PA's work from energy company transformation through to new market entry development and M&A – we have advised on 650GW of M&A transactions globally



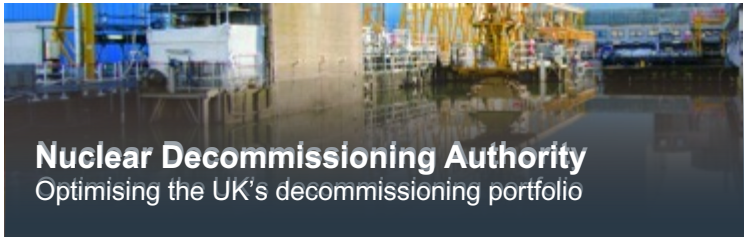
Mainstream Renewable Power

10 year strategic and industrial plan and commercial diligence support for sale process



UK SMR

Operational and customer readiness to receive first orders (UK and global)



Nuclear Decommissioning Authority

Optimising the UK's decommissioning portfolio



GE Renewable Energy

Validated new business model and supported new storage and integrated energy solution




Macquarie

Market entry strategic review for solar plus storage opportunities for C&I in EMEA



Polenergia

Established a geographical and technological diversification strategy; detailed financial modelling of selected European markets




Major Infrastructure Fund

Battery Energy Storage Systems (BESS) – Strategic Market Study and Technology Assessment



Private Equity Firm

Market and Commercial due diligence for a global generation portfolio




Leading infrastructure fund / bank

Acquisition of a GB Meter Asset Provider (MAP)



Ørsted

Leading the transformation to green energy



Major Energy Supplier

Finding new areas for growth as the energy market evolves



European Energy Company

Supporting an energy company to become a demand side response aggregator

- **The British Energy Security Strategy sets out significantly increased ambitions for UK, sending a clear signal to the market but it comes at a risk.....**

The government's Energy Strategy, published on 6th April, is bold and targets:

- **24GW** of New Nuclear by 2050
- **50GW** of Offshore wind by 2030
- **70GW** of Solar by 2035
- **10GW** of Hydrogen by 2030

This will accelerate the UK's transition to net zero, guarantee security of supply and self-sufficiency, and also create at least 40,000 new jobs.

It also seeks to unlock the potential that the UK has for building the next generation of low carbon energy at an unprecedented scale.

At PA, we believe it can be delivered through a seven-point plan:

Engage the supply chain early. Secure manufacturing slots for long lead items. Harness the know how, ideas and expertise to shape the delivery plan now. Aggregate volumes and give a level of commitment to supply chain. This needs to be underpinned by funding and cashflow certainty, so that delivery plans are financeable and contractable

Be attractive -In such a buoyant market, it is critical to be an attractive client. Suppliers (and clients) need to be able to offer the best projects and opportunities to their workforce to attract and retain them, Collaboration based on shared issues, values and purpose, such as creating new apprenticeships and skills development opportunities, using infrastructure to unlock regeneration and social value, or co-investing in digitization and R&D to accelerate outcomes,

Be ingenious – This significant investment comes with huge expectations, not just in achieving the energy supply targets, but in building something the nation can be proud of. We must start with a mindset of “how can we do it”, and leverage similar ingenuity through cross-sector, private and public sector collaboration. By galvanising the energy sector around a common goal and purpose, we can really determine the art-of-the-possible.

Have a clear talent plan -These projects and programmes will be iconic and could be career defining. Imagine being able to say with pride: “I built that”. There is an opportunity to replenish skills at a national level for nuclear, offshore wind, and electricity transmission. Enabling capabilities such as precision manufacturing, data analytics, digital design, asset management, systems engineering, and construction management to be focused on these specific investment programmes will help to replenish our utilities workforce. This needs to be considered in the aggregate at a UK level, so that we can create critical mass in the areas we need it..

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Build legacy not mistakes - It may sound odd, but what would the Victorians do? The decisions we take now on energy infrastructure need to stand the test of time. This includes wise whole-life-cost design choices, but also a proportionate and appropriate level of quality in both build and asset management enablement. We need to take care to thoughtfully put in place the basics which so often catch us out later – the as-built asset registers, validated inspection, operations and maintenance plans, enabled by accurate data and effective IS systems, and underpinned by careful interoperability and sustainability plans.

Be clear on the prize - These new assets will deliver significant benefits – not just the GW output and resilience, but also net zero, job creation, skills replenishment, and regional economic regeneration. If we get this right, new energy assets could be something that local communities are proud of and actively encourage. Developing and maintaining clear benefit realisation plans now will help keep us all focussed on the outcomes we are seeking to achieve.

Ask for help now - The government has created a strategy and vision which is compelling. The industry needs to respond and deliver, but it also cannot do everything by itself. We are working with government to help unlock the market, regulatory, and planning mechanisms to create the conditions for funding and expenditure commitments to be made. But we also need to work together to make procurement decisions that secure the supply chain and workforce needed to mobilise and deliver. .

- **The British Energy Security Strategy sets out significantly increased ambitions for UK new nuclear, sending a clear signal to the market**

Government has set a new ambition to reach **24GW of nuclear power** capacity by 2050.

It has committed to taking at least **one project to Final Investment Decision by the end of this Parliament.**

Sizewell C is first in line, and Government has accelerated progress on negotiations.

The Regulated Asset Base (RAB) model with private finance is the set approach.

A new delivery body – Great British Nuclear – will secure investment and progress projects through to the construction phase.

However, there are a set of very clear risks to investors looking to capitalize in the start of a new pipeline of new nuclear projects

Political risk - The cost-of-living crisis and war in Ukraine have intensified the debate on the UK's future energy mix and how investment in generation should be funded. Sizewell C's future will continue to be subject to shifts in political opinion, especially under a Labour Government.

Financing proposition – The Regulated Asset Base (RAB) model is forthcoming, but working details are still to be agreed. The Government and EDF will each take a 20% equity stake in the project. What remains outstanding are the returns and risk mitigations of the RAB model which will determine the appetite of the remaining 60% of the equity in the project.

Regulatory certainty - Ofgem will oversee the contract and set future price controls once the asset is operational, influencing the risk and return profile of Sizewell C and creating a risk around pressure on finances as regulatory positions shift.

ESG - Whilst nuclear is likely to be included in the UK Taxonomy, debate continues both on how nuclear fits more widely into ESG and how the landscape itself should evolve in response to the situation in Ukraine, presenting a near term material risk.



About PA.

We believe in the power of ingenuity to build a positive human future in a technology-driven world.

As strategies, technologies and innovation collide, we create opportunity from complexity.

Our diverse teams of experts combine innovative thinking and breakthrough use of technologies to progress further, faster. Our clients adapt and transform, and together we achieve enduring results.

An innovation and transformation consultancy, we are 3,300 specialists in consumer and manufacturing, defence and security, energy and utilities, financial services, government and public services, health and life sciences, and transport. Our people are strategists, innovators, designers, consultants, digital experts, scientists, engineers and technologists. We operate globally from offices across the UK, US, Netherlands and Nordics.

PA. Bringing Ingenuity to Life.

Discover more at paconsulting.com and connect with PA on [LinkedIn](#) and [Twitter](#)

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