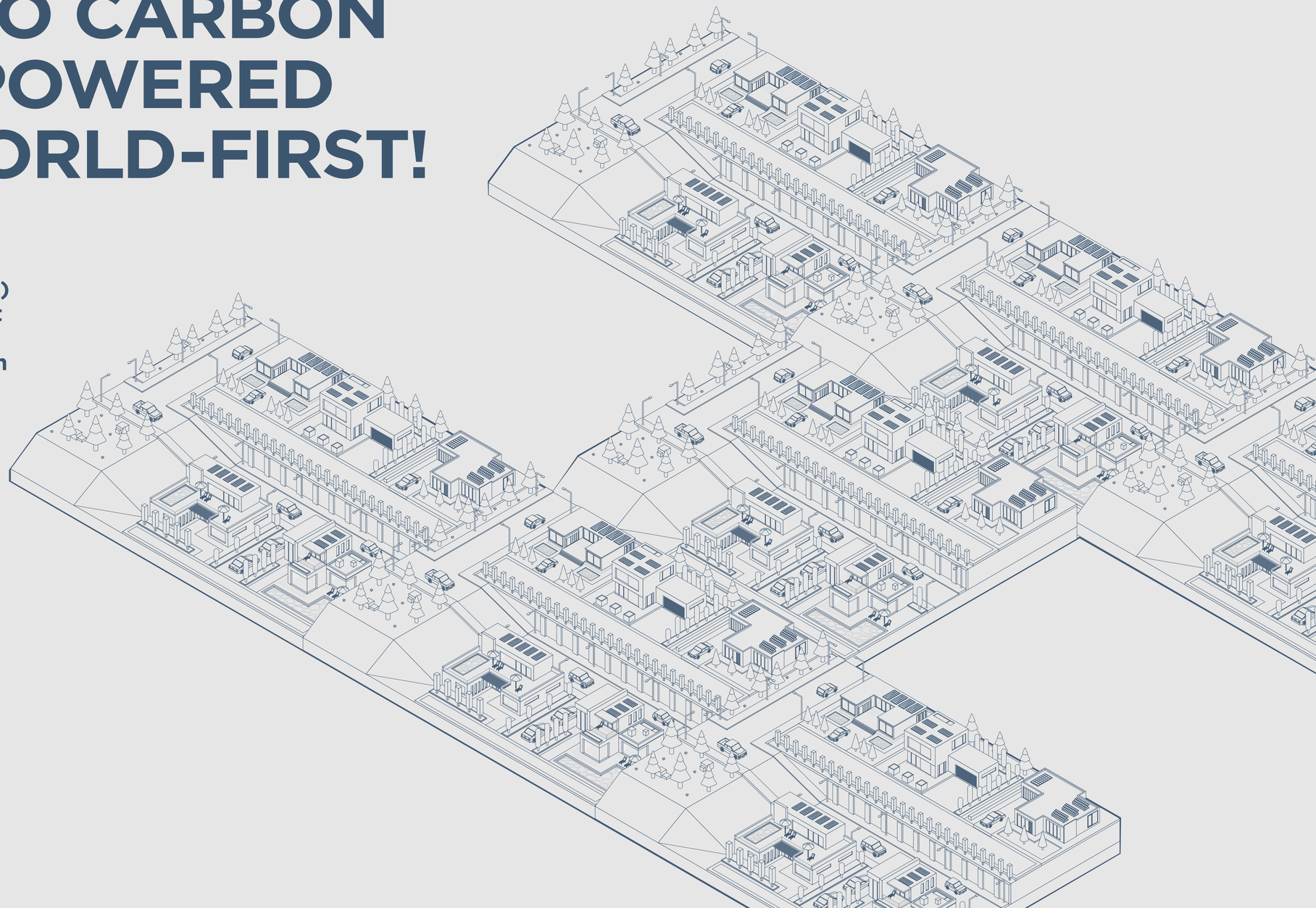
SUSTAINABILITY CASE STUDY:

IMAGINE ZERO CARBON HYDROGEN POWERED HOMES. A WORLD-FIRST!

Addleshaw Goddard's Energy & Utilities practice advised Scotia Gas Networks (SGN) on its Ofgem bid - a pioneering project that will let customers heat their homes and cook their food using 100% green Hydrogen power for the first time.



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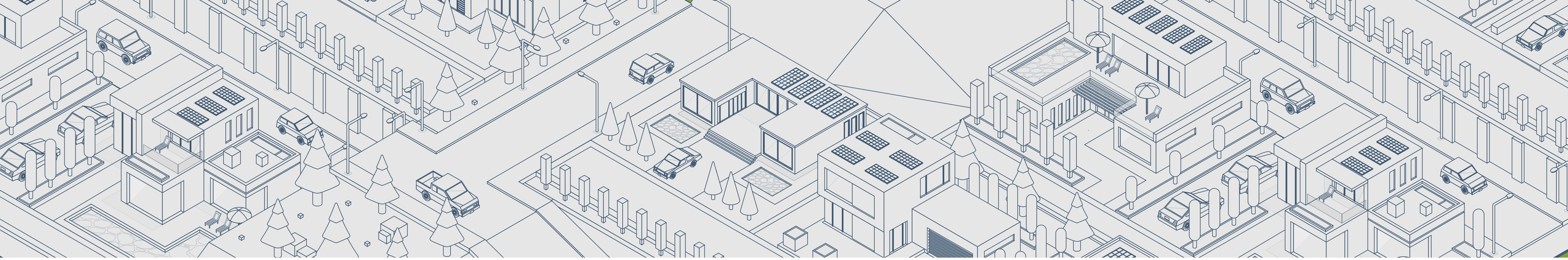

WE'RE DELIGHTED THAT STAKEHOLDERS HAVE RECOGNISED THE CRITICAL IMPORTANCE OF H100 FIFE. IT'S AN EXCITING OPPORTUNITY TO REVOLUTIONISE THE WAY MILLIONS OF PEOPLE HEAT THEIR HOMES. THE HYDROGEN APPLIANCES WILL CONNECT TO THE EXISTING PIPES IN THE HOME FOR ZERO CARBON HEATING AND COOKING WITH NO NEED TO REPLACE EXISTING RADIATORS OR PLUMBING.

Angus McIntosh,
SGN Director of Energy Futures

WHAT WAS THE CHALLENGE?

Replacing natural gas with hydrogen and other low-carbon alternatives is key if the UK and Scottish Governments are to meet legally binding net zero emissions targets. SGN's H100 Fife project is a critical first step as the UK aims to develop 5GW of hydrogen production capacity and a first "Hydrogen Town" by 2030. This ground-breaking project was singled out by the Prime Minister during the launch of the UK Government's 'Ten point plan for a Green Industrial Revolution'. Securing Ofgem approval to proceed was essential to make this innovation a reality by 2022.

HOW WE HELPED

Led by Energy Partners Richard Goodfellow and David Shaw, AG supported SGN's in-house legal team in creating the crucial bid application that will see clean hydrogen gas produced at an electrolysis plant, powered by a local offshore wind turbine. With market-leading knowledge of clean energy regulation and legislation, they were able to identify and mitigate potential risk around its ambitious plans.

IMPACT

The bid was successful, with SGN awarded the contract to deliver this critical first-in-market project. The energy regulator award is up to £18m with a further investment of £6.9m from the Scottish Government. SGN shareholders and Britain's three other gas distribution networks are also providing funding for the project.

Work can now begin on delivering a 100% hydrogen demonstration network in Levenmouth, Fife, that will bring carbon-free heating and cooking to around 300 homes from the end of 2022.

The project will also provide compelling evidence of hydrogen's performance in a real-world domestic setting as a zero-carbon energy source, placing it at the forefront of the green energy revolution.

Our multi-disciplinary AG team will now advise on the contractual framework for this ground-breaking project, including utilising our HighQ tech solution to speed up automation of standard forms, track advice and progress reports.

A FEW TAKEAWAYS

Our experience of H100 - as with other ground-breaking energy projects - emphasises the importance of always being prepared and agile when it comes to:

- long and challenging discussions (particularly when operating with emerging technologies);
- inevitable changes in legislation, regulation and process; and
- potential changes to a project plan (flexibility and scrutiny of detail are essential given the uncertainty about tomorrow's solutions).

CENTRAL HEATING PRODUCES A THIRD OF THE UK'S GREENHOUSE GAS OUTPUT, SWITCHING TO HYDROGEN BECOMES ONE THE MOST SUSTAINABLE AND SCALABLE WAYS OF PROVIDING HEATING AND PUTS SCOTLAND AND THE UK AT THE FOREFRONT OF THE CLEAN ENERGY REVOLUTION. TO BE INVOLVED WITH A FIRST OF ITS KIND PROJECT LIKE H100 FIFE IS INCREDIBLE

Richard Goodfellow
Energy Partner

www.addleshawgoddard.com/en/sustainability-climate-change