



# IDEAL CLIMATE FOR NOVA, VICTORIA SW1

Bringing low carbon, low cost heat and cooling to the heart of London.

An eye-catching structure, Nova is a high profile development and central to the redevelopment of the Victoria area in London

Meeting the high standards of the developer, Landsec, at its core Nova has carbon saving energy infrastructure that will help London achieve its net-zero goals.

SSE has been instrumental in delivering the critical networks that provide low carbon, efficient heat and power to the residents and commercial occupants.

Our Heat Networks team signed a long term contract with Landsec in 2015 for the full operation, maintenance, customer service and asset management of the heat and cooling infrastructure.

## Customers first

Nova is a landmark multi-phase development which will comprise of 418 residential properties and 120,000m<sup>2</sup> commercial office and retail space, including bars and restaurants, when fully built.

Customers will be looked after 24/7 by the award-winning SSE Heat Networks Customer Service team for the duration of the contract. Regular site-based customer engagement days are held, where information about the heating and cooling system is available. Our heat experts answer queries or concerns and also provide energy efficiency advice to customers.

Customers also have the confidence that SSE are founding members of the [Heat Trust](#), the independent heat customer protection scheme, and they have access to an independent ombudsman should they require it.





Each customer receives a Welcome Pack and SSE provides clear supply agreements which set out tariff methodologies and levels of service. A significant advantage of an SSE long-term contract is that SSE shoulders risks from unexpected plant failure or energy price fluctuations, so that customers do not bear this risk and know precisely how their bills and annual price changes are calculated.

### Working hand in hand with our client

Throughout the design and construction phase, our experts worked with the client team to ensure the network was designed for optimal efficiency. We also developed safe and effective maintenance and replacement strategies and worked with the client's team to ensure these were embedded in the design for the site.

A complex system such as this, requires comprehensive testing and commissioning so SSE worked closely with LandSec supplying detailed commissioning specifications to be reflected in the client's supply chain obligations.

If individual plant and management systems are tested in isolation, problems may arise after commissioning, so the SSE specification ensures 'whole system' testing is carried out with full demonstration of all equipment working together on a fully automated basis.

During construction, our highly experienced design, commissioning and project management team worked on-site with the Landsec team to ensure the installation met the agreed design and commissioning specification. They were also able to assist with snagging to ensure any defects were corrected.

SSE takes an 'asset operator' perspective during the construction process and absorbs long-term project risk, so clients have confidence in the infrastructure they are investing in.

*"As part of our commitment to the environment, Landsec designed and installed an efficient energy centre capable of providing heating, and cooling to all of the residents and commercial occupiers of Nova. To find an operator for the energy centre we ran a comprehensive tender process, where SSE Heat Networks Limited were able to demonstrate their technical ability and commercial aptitude and were therefore chosen to operate the system for a 25 year term."*

*Phase 1 of Nova completed in 2017 and SSE have been successfully operating the energy centre delivering efficient management of both technical and commercial aspects, supporting a large mixed use development in the heart of Victoria. Landsec are developing further phases of Nova and look forward to a continued partnership with SSE as these phases complete."*

Ian Burr || Head of Property Management, Landsec

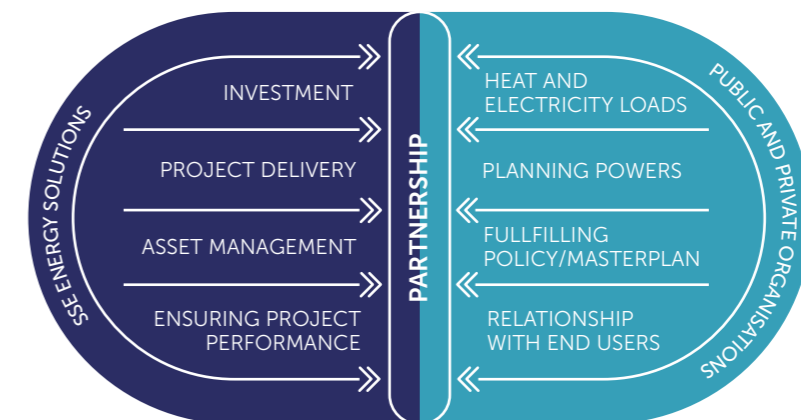
### Focus on carbon reduction

Developers in London must meet stringent carbon saving targets for new build sites. Typically, these targets are higher than in other parts of the country, so on large schemes such as Nova, heat and cooling networks save more carbon than conventional gas boiler systems.

The Nova development is a good example of lower carbon, efficient local energy generation and we worked closely with the client to devise an electricity tariff structure which was significantly lower than traditional grid connection.

At Nova, the CCHP (Combined Cooling, Heating & Power) is supplemented by highly efficient building fabric to increase the carbon reduction potential. Through this use of CCHP, the site saw a predicted drop of 1017.3 Tonnes of CO<sub>2</sub> which is a 25% reduction in carbon emissions in comparison to a base case design criteria using natural gas boilers and air-cooled electric chillers,\* therefore proving Nova can contribute significantly to meeting stringent low carbon targets.

\*according to SAP 2012 CO<sub>2</sub> emission factors.



### Ready for change

Any long term infrastructure development project like this must be ready to adapt to changes in the market and regulations. SSE is an ideal partner in this regard and we have played an active part in helping to develop the market frameworks around heat, liaising with the Government in plans for regulation of the sector and also contributed to the CIBSE Code of Practice for technical standards for heat networks. In addition, we took a key role in the development of the consumer champion Heat Trust so we are ideally placed to advise, influence and act to ensure that networks can be adapted effectively so clients and customers can maximise the benefits afforded by new policy and regulation.

### Net zero carbon future

As an organisation we have key relationships with all major stakeholders in the sector and can ensure we influence using our deep experience and credibility in the industry.

As the UK moves to a net zero carbon future, the decarbonisation of heat is a significant challenge. We are working with our clients to develop energy strategies for new build sites and retrofit solutions for existing sites, which help ensure they are low carbon and ready for the UK's zero carbon future.

This includes incorporation of waste heat, addition of heat pumps, use of storage to enable demand side management together with the incorporation of green gas and renewable electricity through "sleeved" supply arrangements.

Many heat networks also have the potential for expansion and with our engineering and commercial expertise, SSE is always looking at ways we can expand our heat and cooling networks to serve other sites in the area, bringing benefits of low carbon heat and cooling at affordable costs for our clients and connected customers.

We specialise in the design, construction, maintenance and operation of the complete heat infrastructure for residential and commercial developments. This includes taking on full "ESCo" responsibility for the management of the infrastructure from the Energy Centre to the customer meter and heat interface unit within the customer's premises.

We can also offer significant capital investment into schemes based on a long term asset ownership or lease model.

Our service includes full responsibility for customer service provision including; meter reading, 24/7 fault response, billing and account management including debt recovery and home moves, all provided through our UK based customer teams.

# SMART DISTRIBUTED ENERGY INFRASTRUCTURE SOLUTIONS

Designed to meet local energy needs and drive Net Zero.

SSE Energy Solutions is part of SSE plc, a UK based FTSE 100 company with 75 years' experience operating in the fast-changing energy industry.

SSE Energy Solutions plays a major part in the emerging consumer-led energy system, and provides key services to enable users to benefit from new ways to optimise and manage their low carbon energy use.

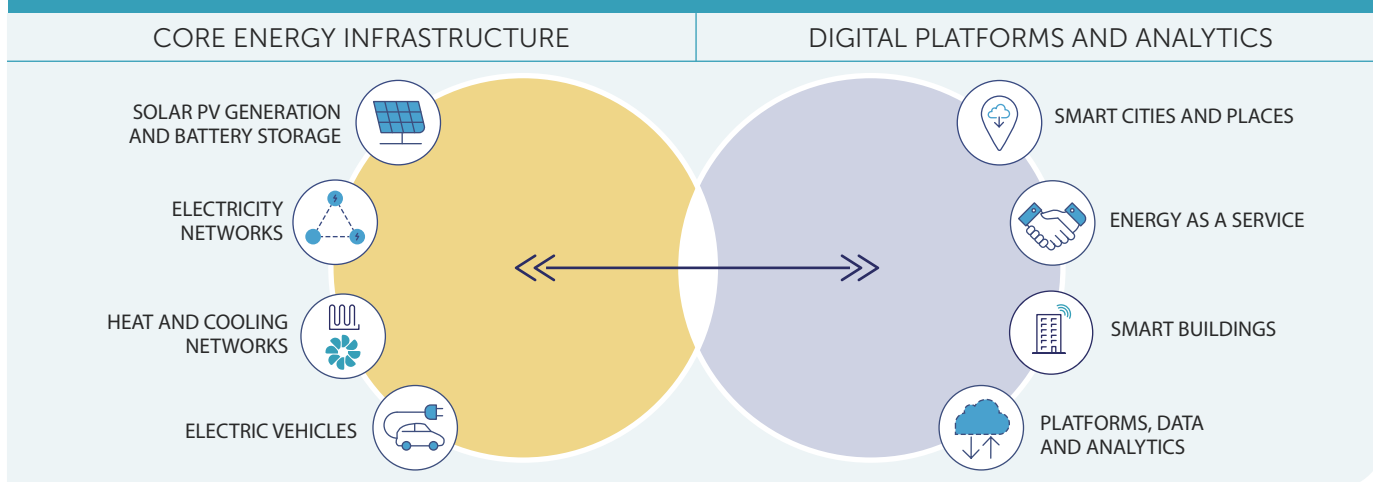
Our Distributed Energy business teams adopt a whole system approach by investing in, building and connecting your localised, flexible energy assets to accelerate your path to net zero and create a more resilient energy system for the long-term.

Right now, your decision to pick SSE Energy Solutions, part of an established renewable energy company investing in all our futures, will be the right choice for you and for our environment.

Our energy solutions include:

- Electric vehicle infrastructure for public transportation and vehicle fleets
- Local electricity infrastructure including building, owning and adopting private HV networks
- Heating and cooling networks for residential, commercial and industrial consumers
- Local energy generation, including funded offsite/ onsite solar PV
- Energy storage solutions, including battery storage
- Optimising building energy consumption and use
- In-house digital twin engineering team for modelling optimised energy flows
- Data platform services to support smart buildings, places and cities
- SSE Enhance, our aggregation and trading platform for small energy assets
- A growing suite of green energy supply solutions, including corporate power purchase agreements.

## WHOLE SYSTEM THINKING – ACCELERATING THE JOURNEY TO NET ZERO



Get in touch with our team to find out how we can help you

[distributedenergy@sse.com](mailto:distributedenergy@sse.com) || 0345 070 2019 || [sseenergysolutions.co.uk](https://sseenergysolutions.co.uk)

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