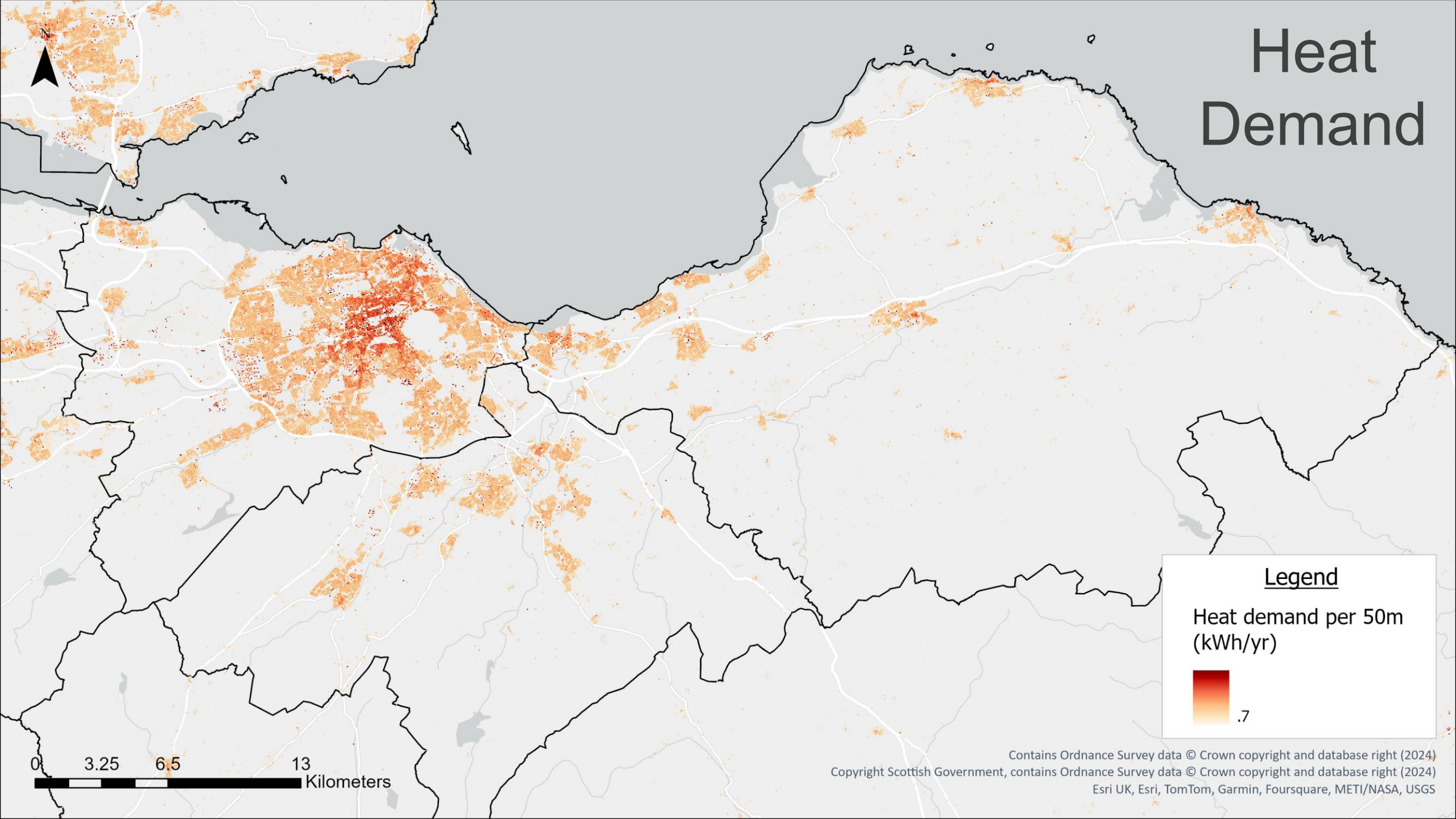


SE Scotland Regional Heat Network Vision

MARTIN HAYMAN

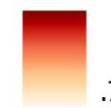
MHAYMAN@EASTLOTHIAN.GOV.UK

Heat Demand



Legend

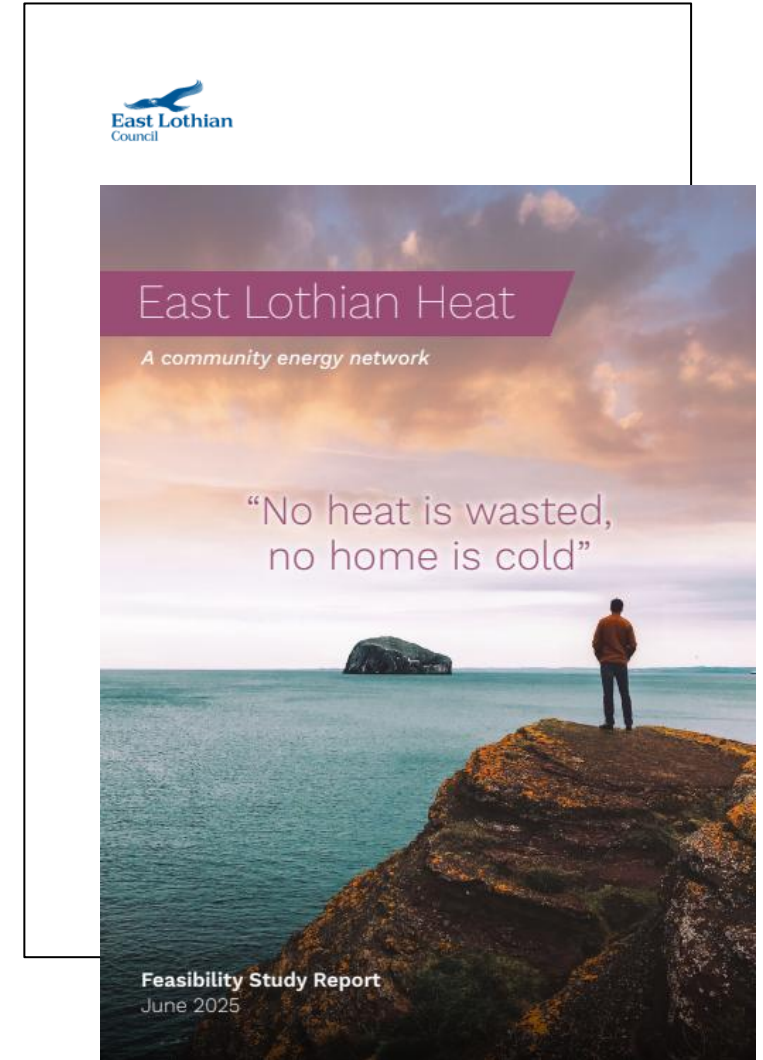
Heat demand per 50m
(kWh/yr)



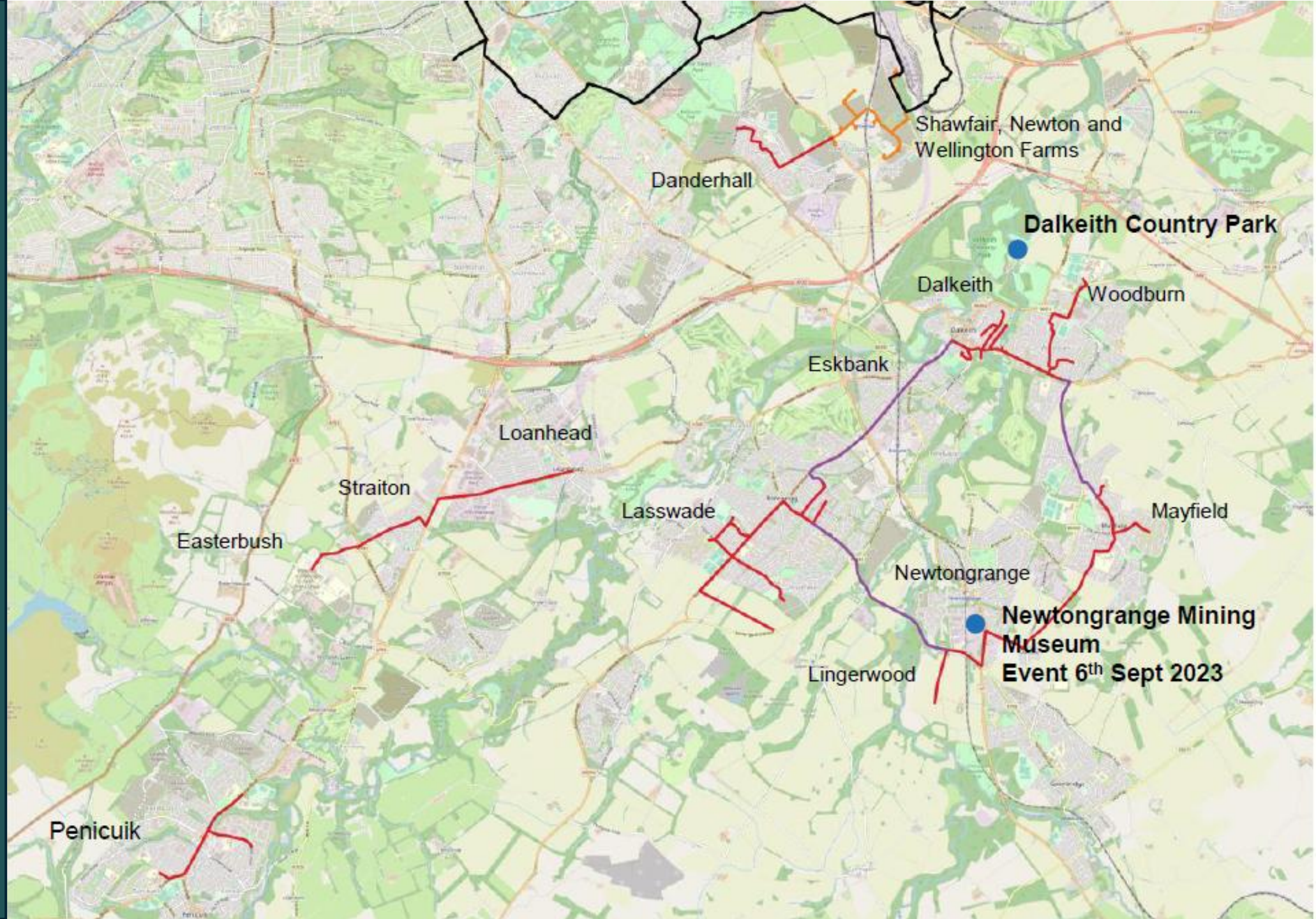
.7

0 3.25 6.5 13
Kilometers

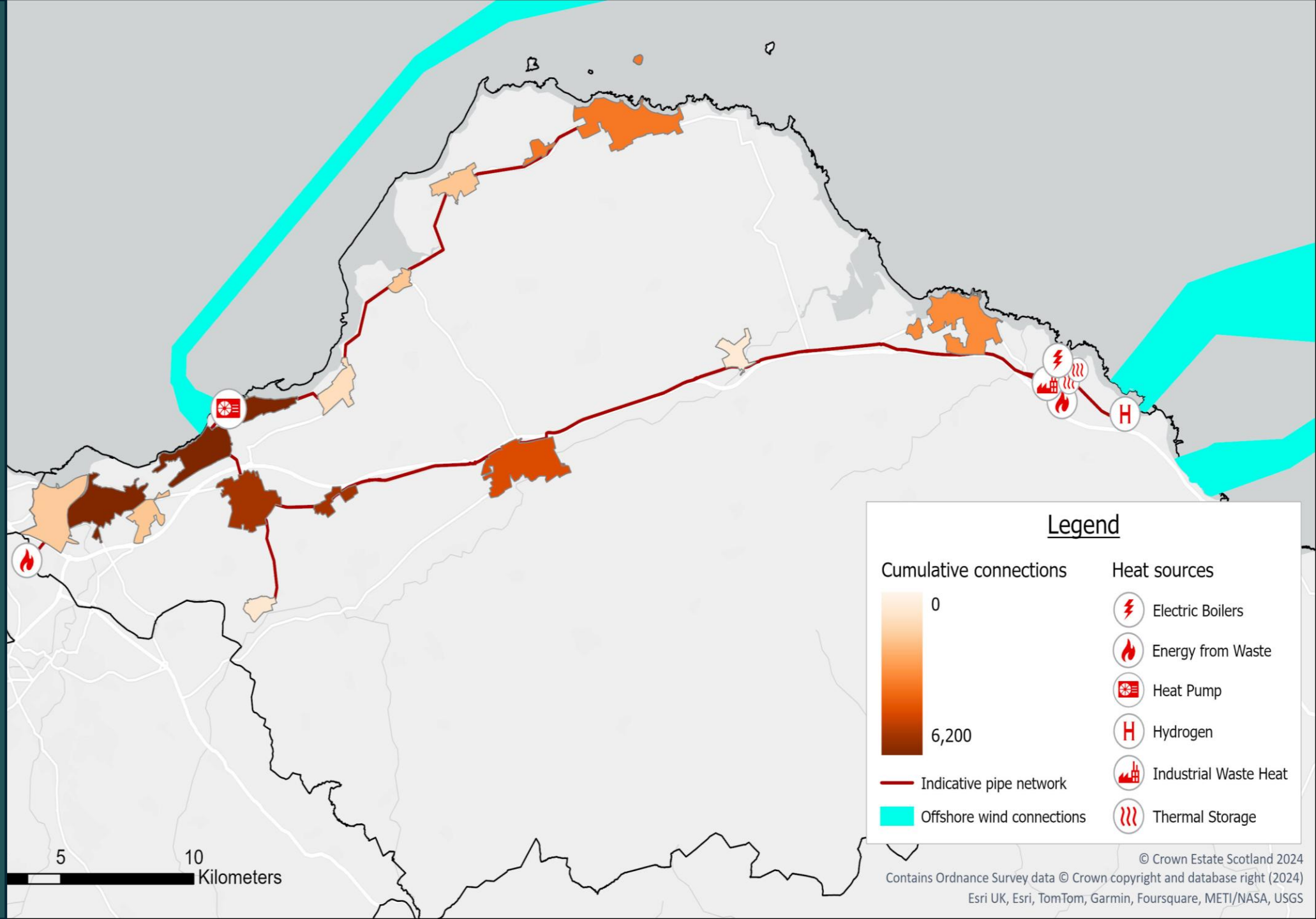
Edinburgh, Midlothian and East Lothian LHEES



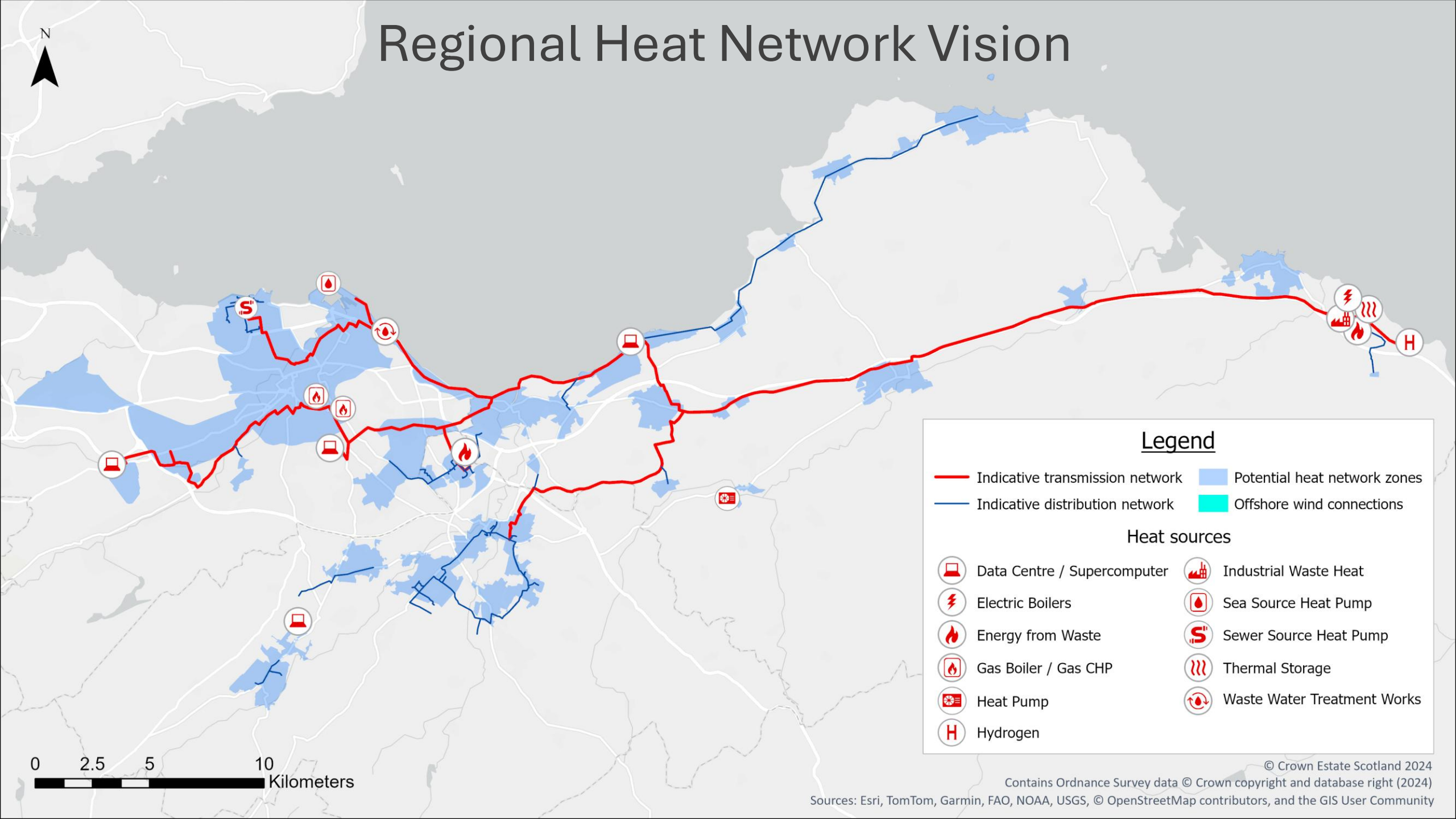
Midlothian LHEES



East Lothian LHEES



Regional Heat Network Vision



Legend

- Indicative transmission network
- Indicative distribution network
- Potential heat network zones
- Offshore wind connections

Heat sources

- Data Centre / Supercomputer
- Electric Boilers
- Energy from Waste
- Gas Boiler / Gas CHP
- Heat Pump
- Hydrogen
- Industrial Waste Heat
- Sea Source Heat Pump
- Sewer Source Heat Pump
- Thermal Storage
- Waste Water Treatment Works

0 2.5 5 10 Kilometers

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Solution by 2031

+1,500 GWh/y

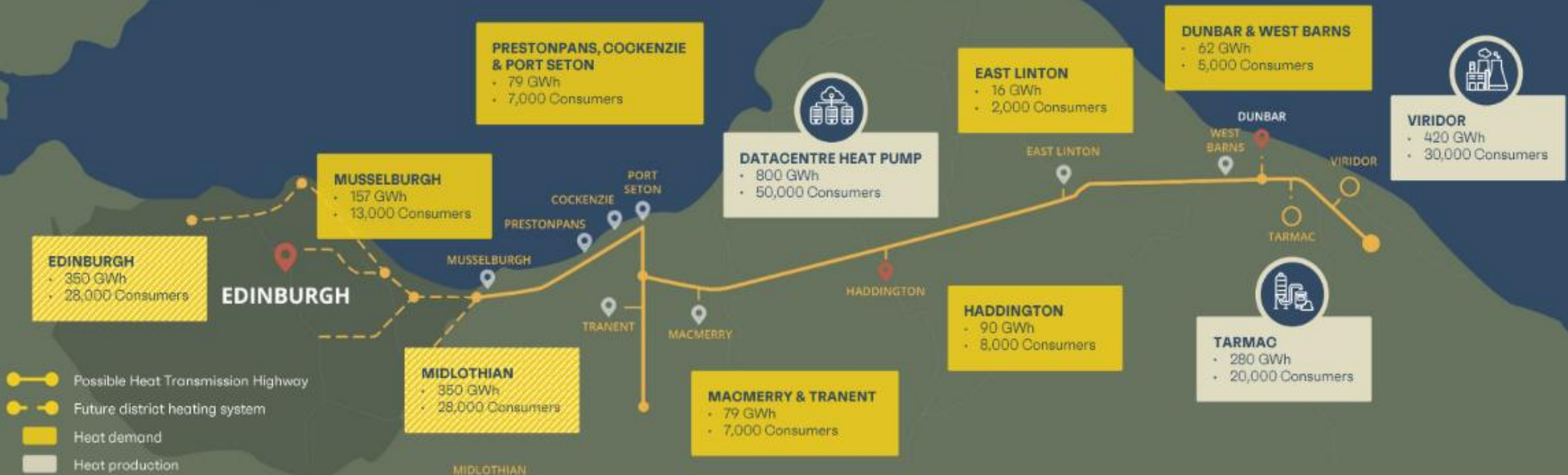
Total consumers: ~100,000

Largest heat network in the UK also allowing for exporting heat to:

- Edinburgh 350 GWh
- Midlothian 350 GWh

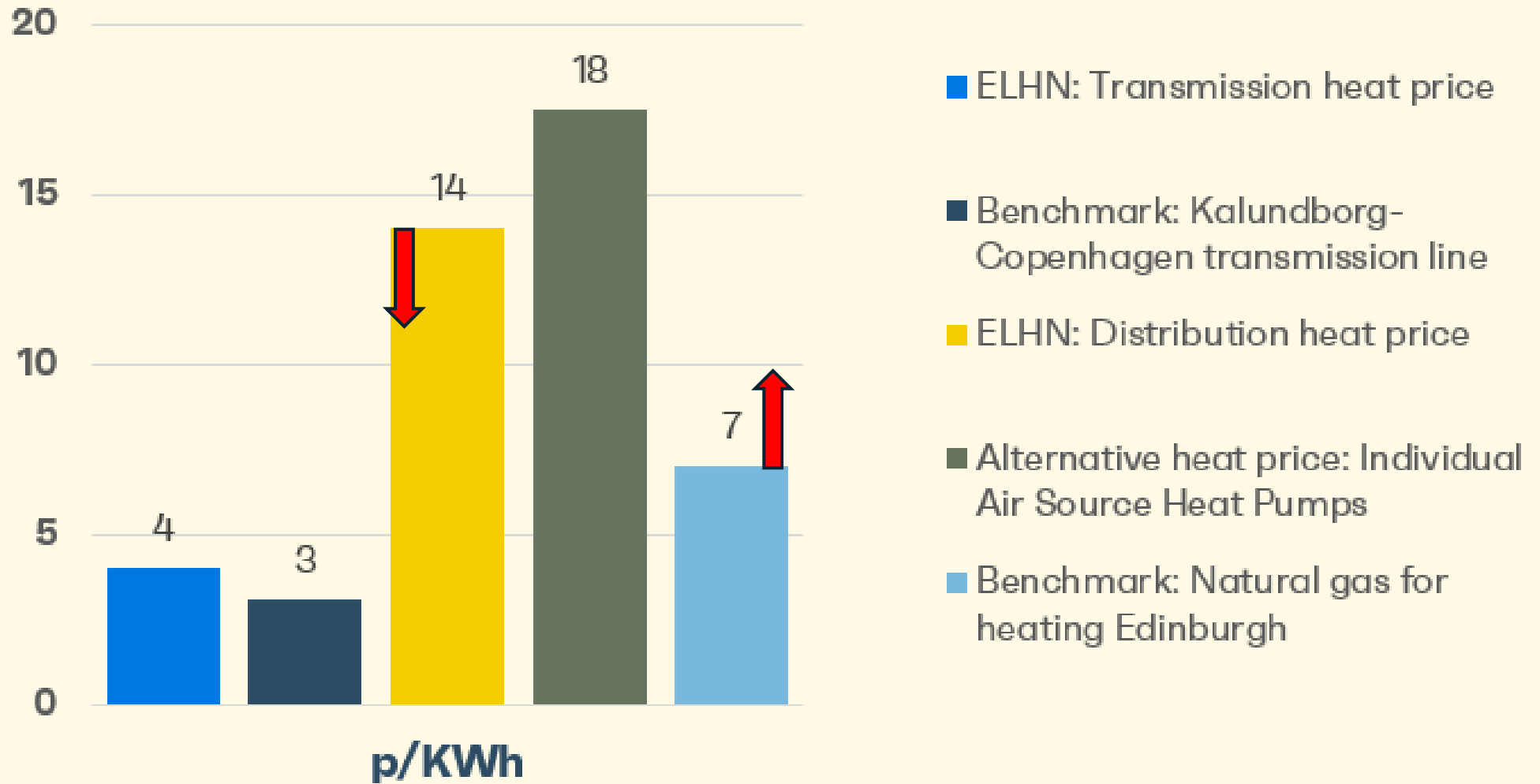
Further possible heat production to connect

Future hydrogen · Waste to energy · Other?



Feasibility results

Heat price per unit

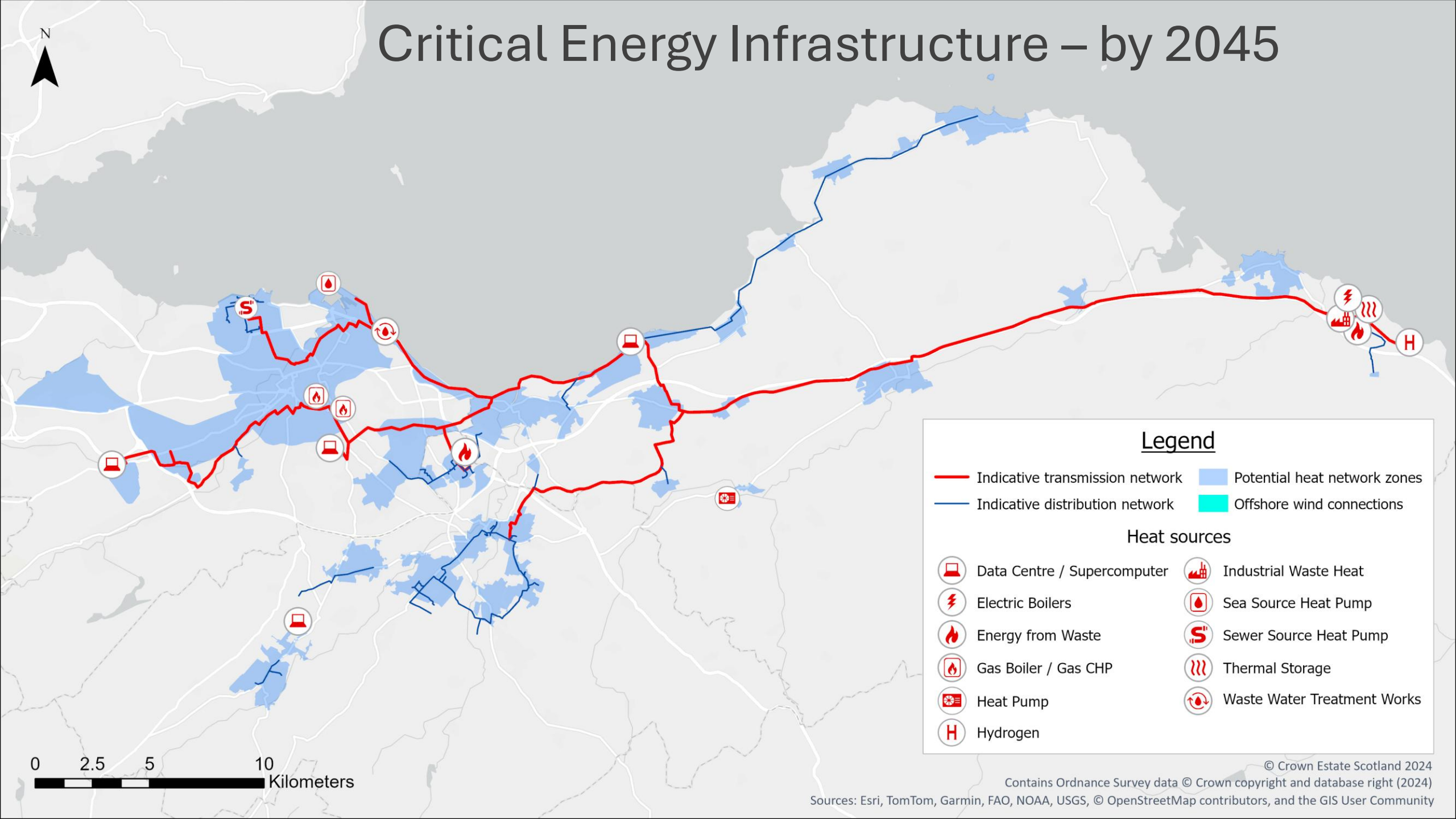


Delivery Priorities

“No heat is wasted, no home is cold”

- Lothian Heat CIC established in October 2025
- Partnerships agreed with East Lothian Council and City of Edinburgh Council
- Recruiting a Development Team
- Prioritise heat network projects where heat is readily available
- Develop the business case for the regional supply and transmission network
- Work with Transition Finance Scotland to unlock investment
- Develop a Delivery Model that results in the cheapest possible heat for residents

Critical Energy Infrastructure – by 2045



Legend

- Indicative transmission network
- Indicative distribution network
- Potential heat network zones
- Offshore wind connections

Heat sources

- Data Centre / Supercomputer
- Electric Boilers
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- Gas Boiler / Gas CHP
- Heat Pump
- Hydrogen
- Industrial Waste Heat
- Sea Source Heat Pump
- Sewer Source Heat Pump
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0 2.5 5 10 Kilometers

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