London Energy Partnership

Low Carbon London: from vision to reality

LONDON DEVELOPMENT AGENCY

Decentralised Energy Delivery Programme

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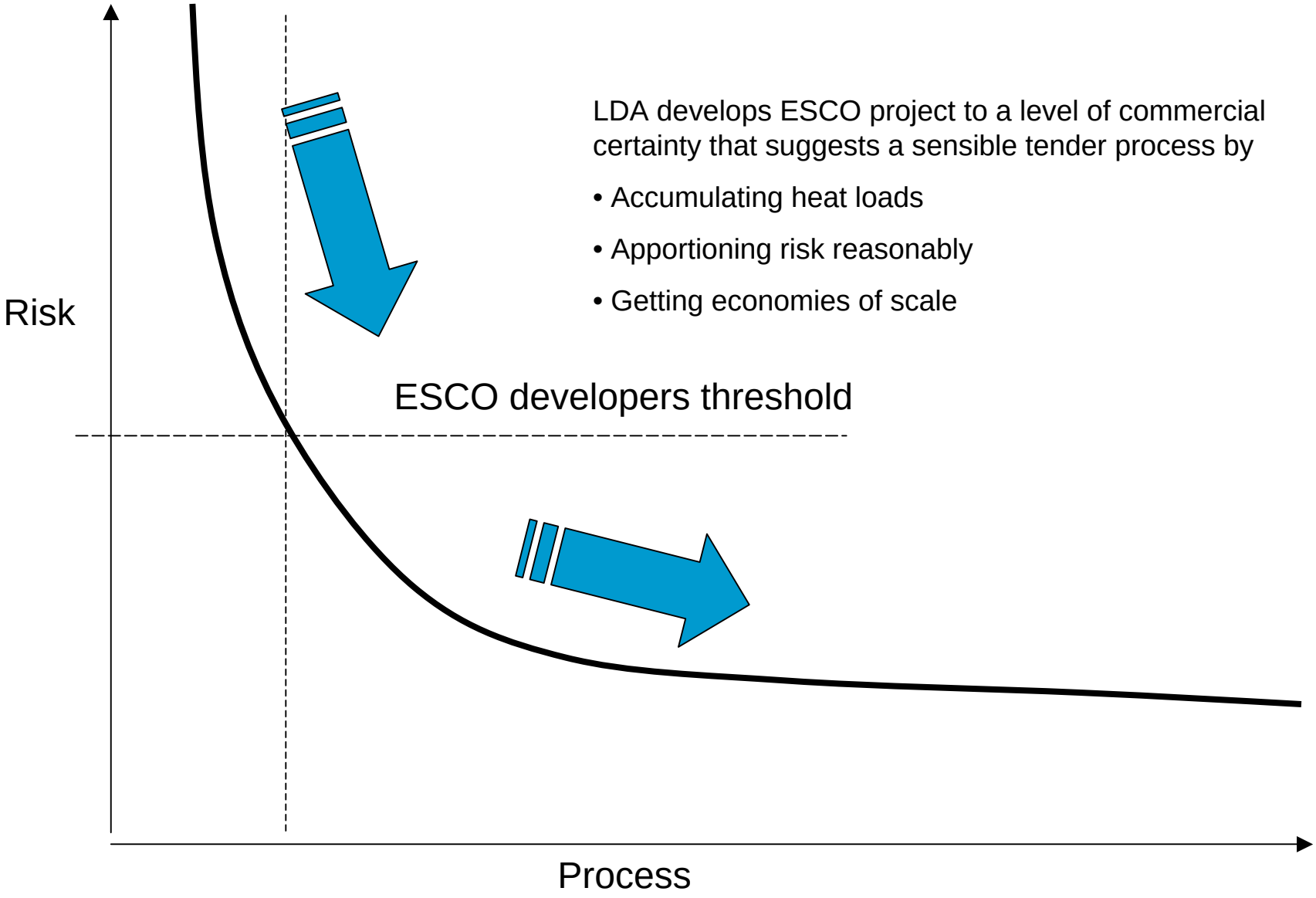
Director of Decentralised Energy Delivery

The Rational for LDA's DED Team

- The objective of the DED team is to **deliver** low and zero carbon energy supply schemes where:
  - The market is failing to do this or,
  - Where the market is proposing a sub-optimal solution
- This may occur where:
  - Long development timescales create too much uncertainty and risk for commercial involvement;
  - Contiguous developments are pursing independent approaches where a collective approach would be much more effective;
  - The size of the project is to small to deploy the best technology.
- Projects will:
  - Be based on **conventional proven technologies**
  - Take forward projects that are otherwise **commercially viable**
  - Fulfill the Mayor's climate change strategy

Taking ESCO developers down the risk curve



LDA develops ESCO project to a level of commercial certainty that suggests a sensible tender process by

- Accumulating heat loads
- Apportioning risk reasonably
- Getting economies of scale

Olympic Fringe CHP / district heating (LTGDC)

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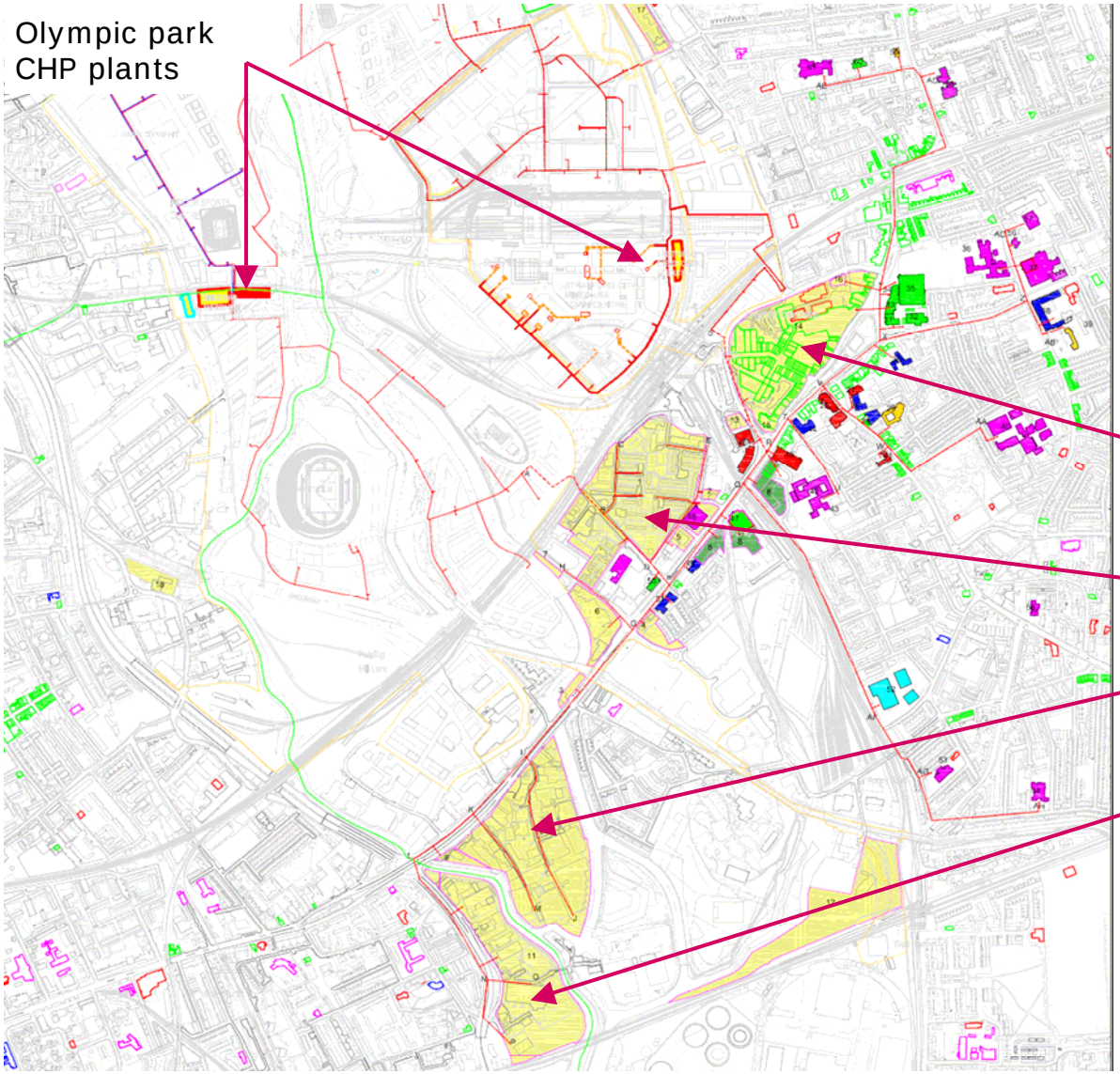

10,000 new dwellings

1m ft² Commercial

6m tonnes of CO_2 reduction potential

Stratford town centre

Stratford high street

Sugar House lane

Bromley on Bow

Decarbonising the Thames Gateway.

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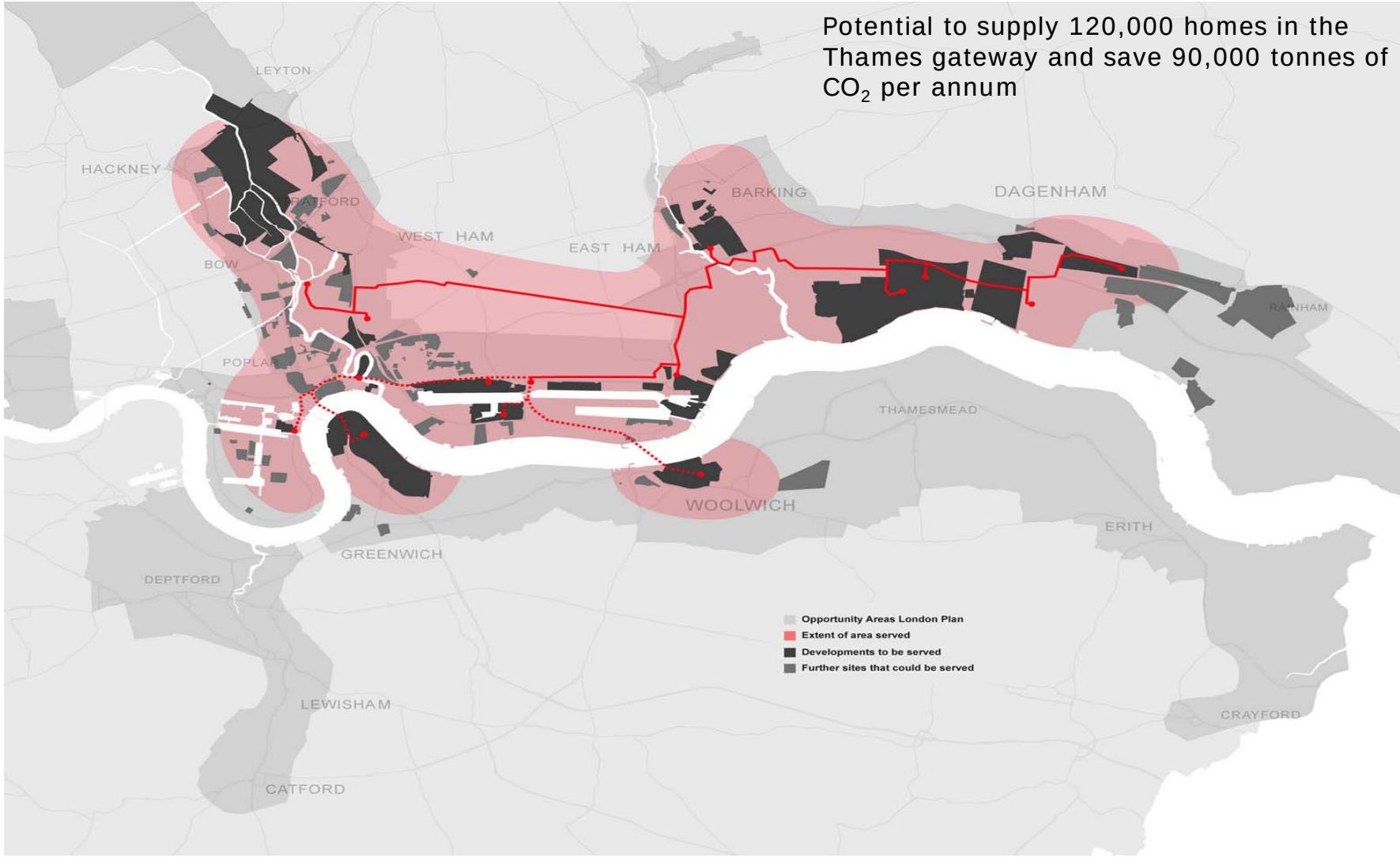

Barking Power

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Power Station

- Combined cycle gas turbine plant (CCGT)
- 1,000MWe from 5 gas turbines and two steam turbines
- 46% efficient (**400MWth** of heat into Thames)
- Addition of a further 400MWe planned
- Owners have committed to supplying **100MWth** heat from the new extension

The Benefits

•Potential to supply 120,000 homes (400MWth)

•Saves 90,000 tonnes of CO2 per annum

Barking Power
District Heating Pipework Routes (1)

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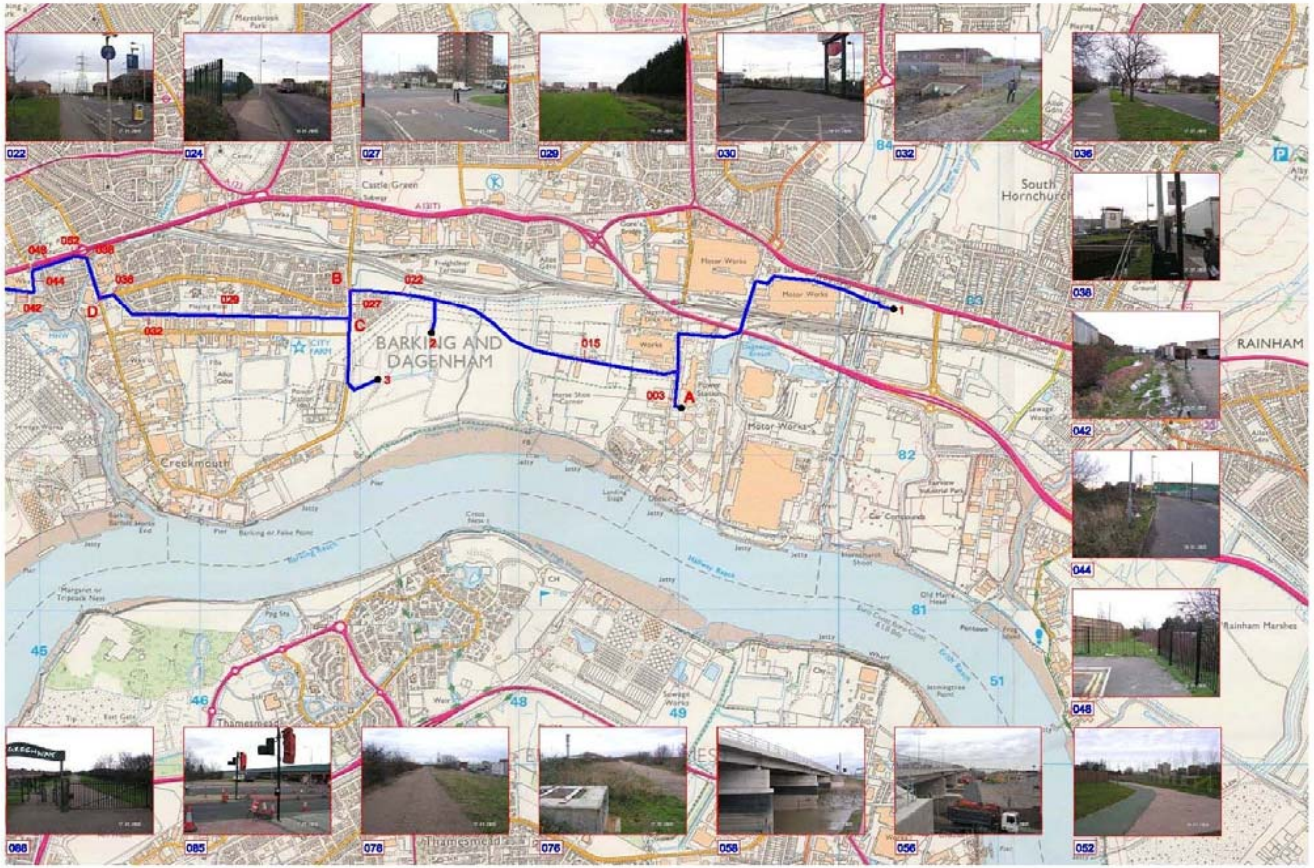

Barking Power
District Heating Pipework Routes (2)

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SBEG Initiative (South Bank Employers Group)

Proposed developments

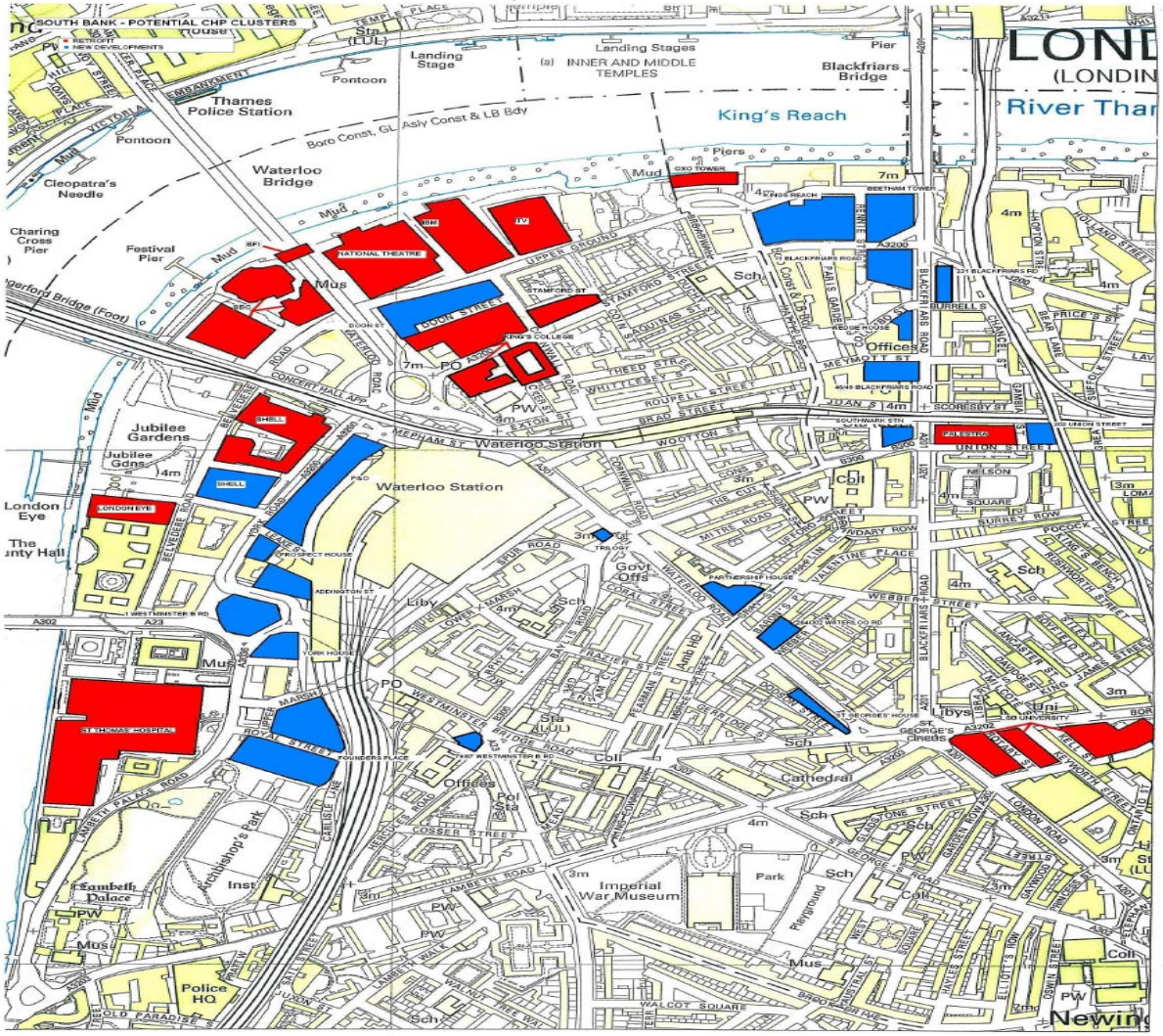
2,000 hotel rooms

3.28m ft sq offices

30,000 ft sq retail

1,800 dwellings

11 Existing loads, including Guy's, Shell building, IBM etc



Decarbonising the Thames Gateway.

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