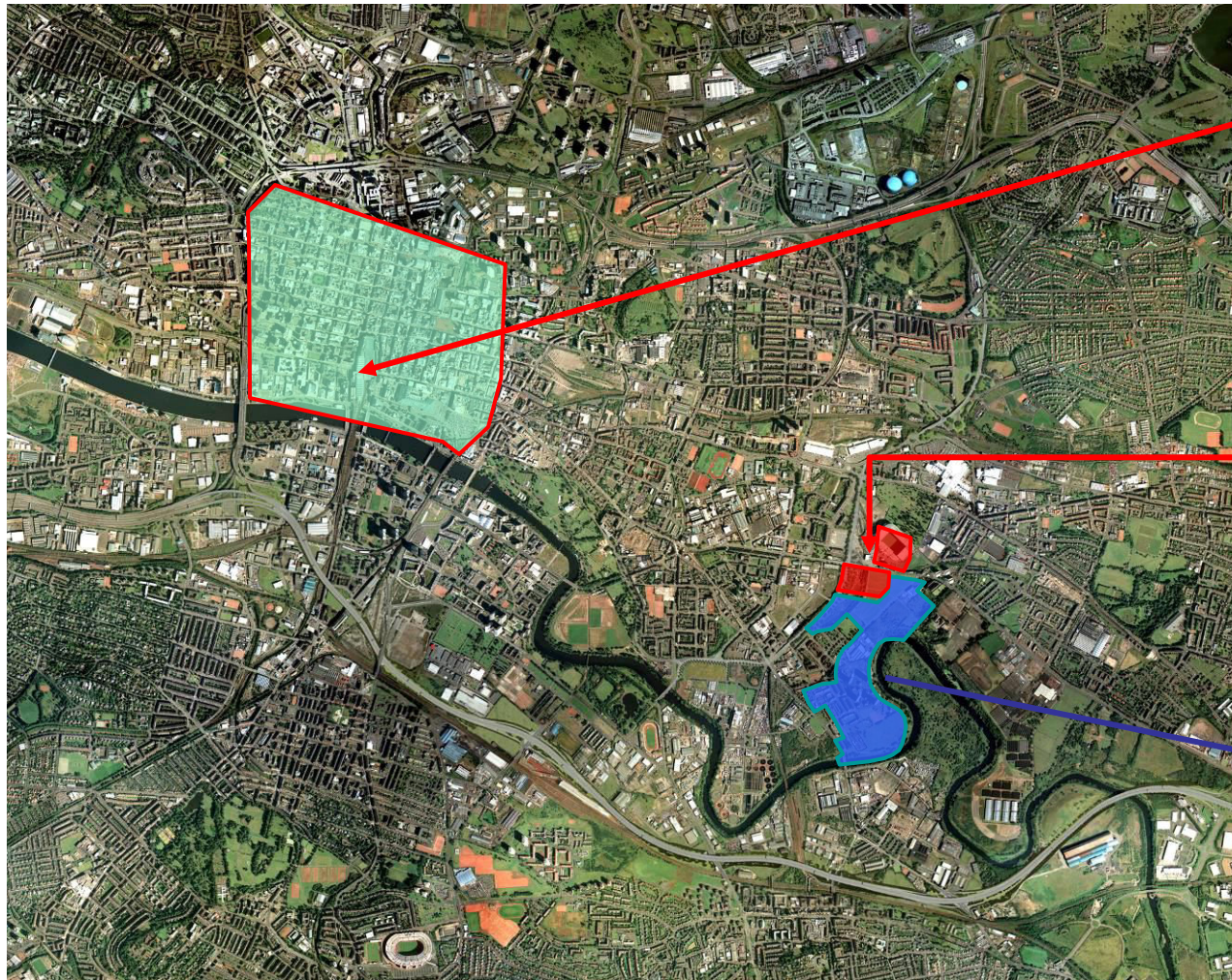


The Athletes' Village - Energy Centre



- Ambitious regeneration programme for East End of Glasgow.
- 33 hectares of brown field area transformed into a low carbon housing development: 700 houses, 120 bed care home.
- Initially created for the Commonwealth Games 2014 has a wide legacy for the city.

The Athletes' Village - Energy Centre



**City
Centre**

**Emirates
Sports Arena
Velodrome**

**Athletes
Village**

MODEL



The Athletes' Village – Energy Centre



- The Energy Centre will:
 - Provide hot water for houses, care centre and Emirates Arena.
 - Combined Heat and Power (CHP) engine, 3 boilers and thermal store
 - Achieve 2 key sustainability commitments (reduce waste and lower carbon emissions) through sustainable development and living.
- The Village regenerates the area, creates opportunities for employment and training, local business and social enterprise.
- Transport Strategic Plan
- Timescale: 2009 – 2014



Actors

Developed by **Glasgow City Council** with City Legacy

1. The Athletes' Village site:

- private-sector consortium including Scottish and Southern Energy).
- 3 Housing Associations (Glasgow Housing Association, Thenue Housing and West of Scotland Housing Association).

2. Energy Centre: VitalEnergi

3. Care Home Unit: City Building

Integrated approach

- Organisation: integration between private and public sector working together to transform a brown field into an attractive urban environment.
- Legacy post-Commonwealth Games 2014 : regeneration of Glasgow's East End with sustainable living.
- Sustainable homes with BREEAM and EcoHome rating.
- Energy & Social approach: reducing energy poverty creating housing with District Heating network.



Integrated approach



- Improvement in transport network, promote low carbon transport system.
- Improvement in the drainage system (surface water).
- Generation of employment and skills: 620 direct/indirect jobs (incl. 84 apprenticeships) in the construction of the Village.
- The Athletes' Village model will produce 60% less CO₂ emissions than if powered by an electrically heated system (contribution to Glasgow's SEAP).
- Partnership with London 2012 Olympic Games Village (26.000 items of fittings/furniture reused).

Budget

- Project Investment : € 240m approx. (£200m approx)
- Examples of expenditure: £8m remediation land; £7m retrofitting post games
- Housing model: 300 for private sale; 400 homes for rent (Housing Associations).



Results

- ✓ **The Athletes Village** completed by 2014.
- ✓ Development built to BREEAM standards and achieved “Excellent” *EcoHomes* rating.
- ✓ **Energy Centre** completed 2013: energy heating system 40% more efficient than conventional system.
- ✓ **Carbon Projections**: 1013 tonnes of carbon saving contributing to SEAP targets.
- ✓ New **transport network** completed (M74 and new main road connections)
- ✓ Flooding Mitigation (surface water system separated from sewerage **drainage system**).
- ✓ **Community involvement**: employment and training (City building/ apprenticeships)

Key elements of success

- The Athletes Village brings social and economic regeneration to the area by creating opportunities for employment and training, local business and social enterprise.
- Supported by a strong public and private sector partnership.
- The Energy Centre will reduce fuel poverty with a legacy of high quality homes for local people, providing energy 40% more efficient than conventional heating systems.
- Flooding Mitigation (Strategic Drainage Plan)
- Infrastructure for DH expansion to the East End of Glasgow.
- This is an example of Glasgow building a low carbon economy that will not only deliver a better environment, but a better life for all Glasgow citizens.

Problems along the way

Challenge:

- Contaminated land
33ha
Invasive species
Other contaminants



Solution:

- Environmental Impact Assessment
- Remediation of site - £8m
- 1 year programme
- VHE – soil hospital (140,000m³)



Other things that need to be mentioned



- A lighthouse project connected to the Commonwealth Games provides added potential for dissemination.
- Expansion in future to the East Smart Grid and Clyde Gateway.
- Each household has a heat meter: accurate energy bills, no estimated bills.

For further information:

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