

Re: Climate Change

— *what's a local authority officer to do ?*

Dr Donald Payne

20 October 2022

Re: Climate Change

(1) Regeneration

(2) Reconnecting



(3) Rewilding

(4) Renewables

“seek to bring damaged land back into
beneficial use”

- Scottish Executive Circular 1/2000

“council declared a climate emergency in
September 2019”

- Fife Climate Action Plan 2020-2030

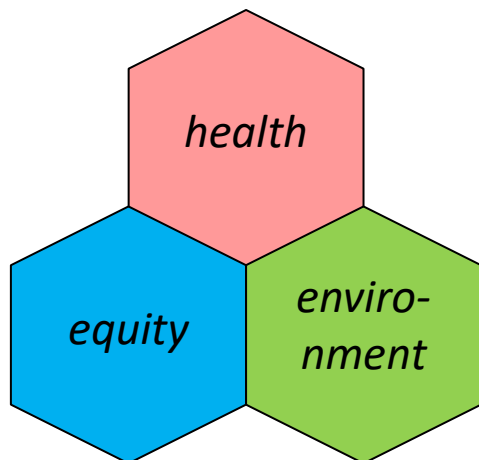
Voluntary **remedial action**
on contaminated land

Redevelopment encouraged
through the **Local Plan**

(1) **Regeneration**

'Do good' to help the wider
community and the **climate**

Work in tandem with the
Vacant & Derelict Land team



'Triple win'



(2) Reconnecting





10-15 yrs



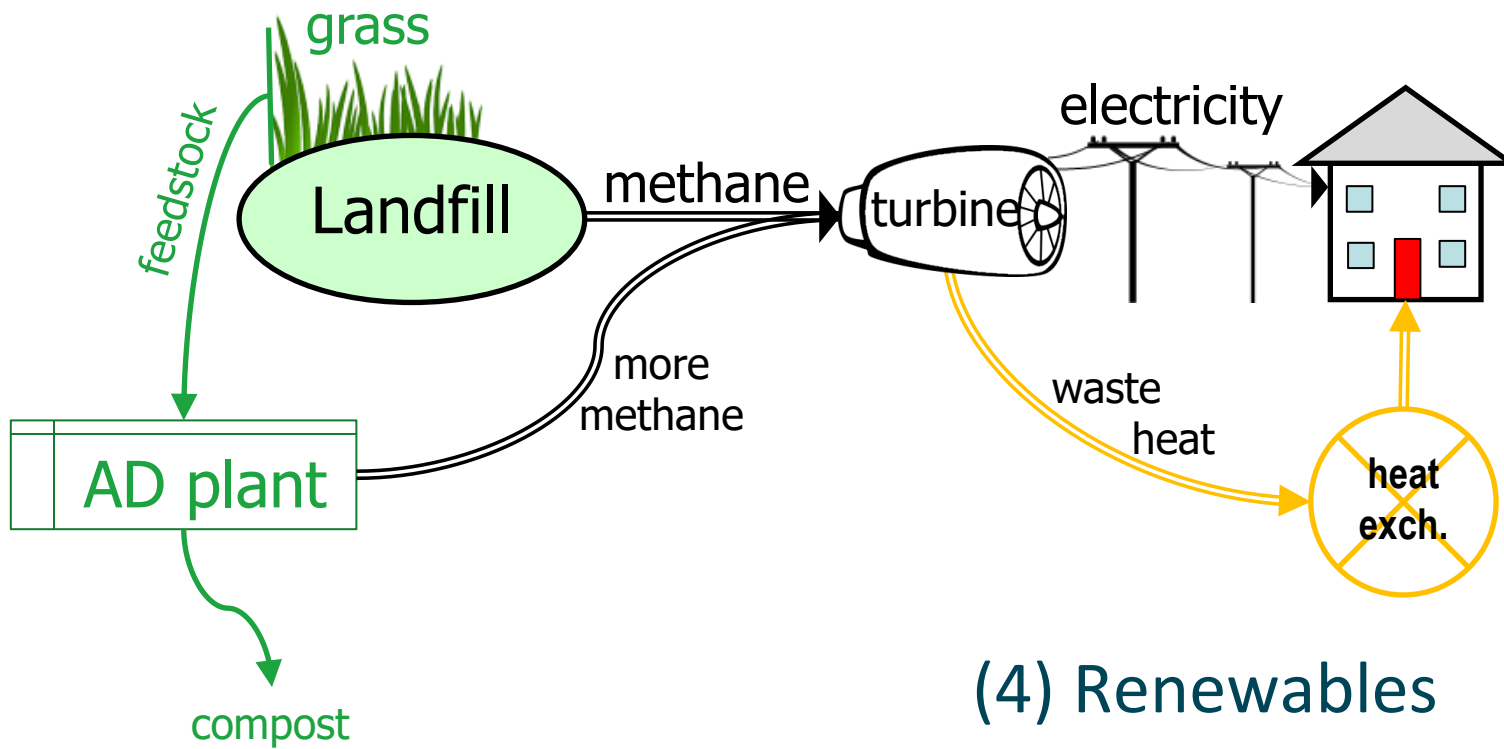
15-40 yrs



40-50 yrs

(3) Rewilding

→ SSSI?



(4) Renewables

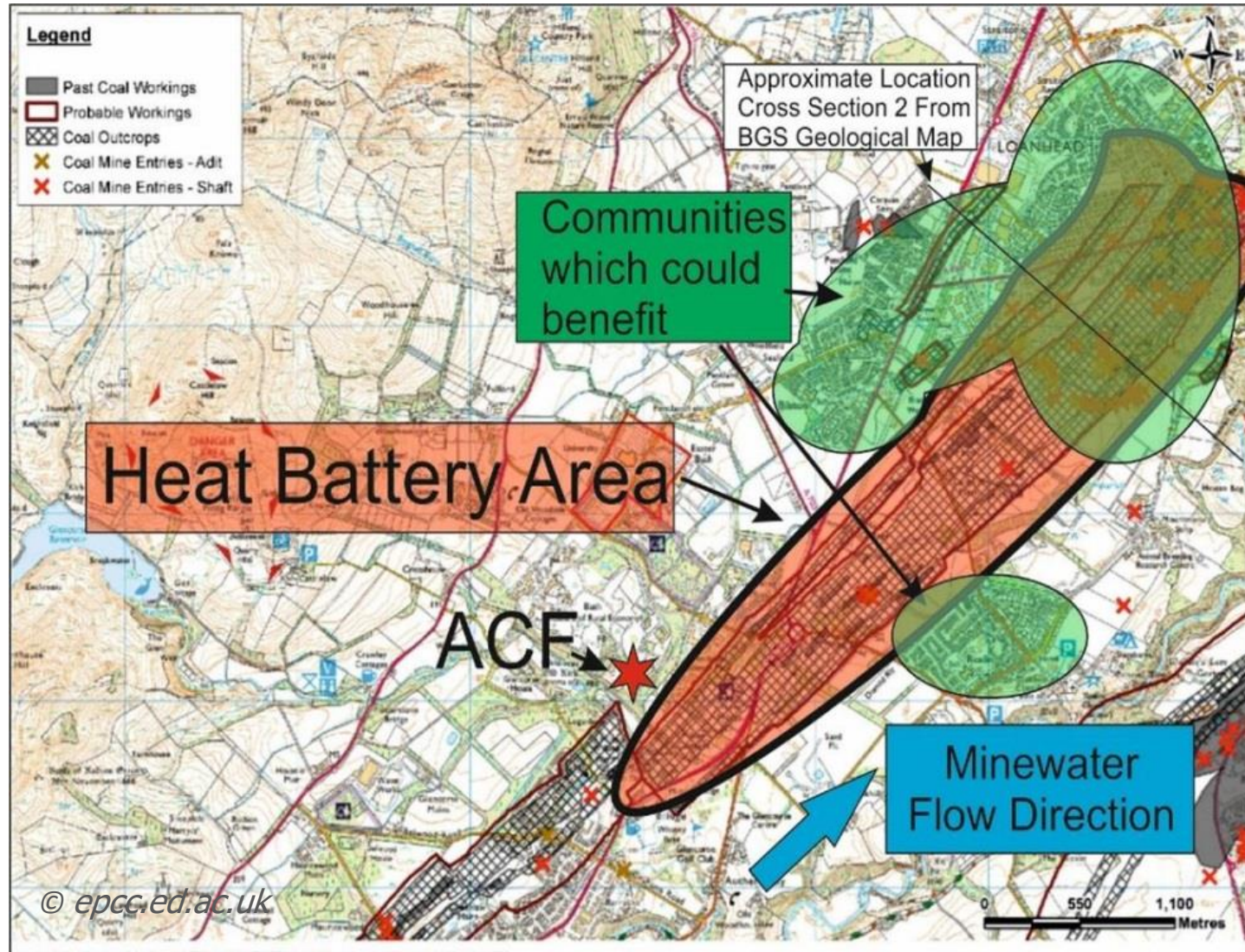
- ✓ high school
- ✓ care homes
- ✓ high-rise flats
- ✓ swimming pool
- ✓ police station
- ✓ council offices
- ✓ private flats
- ✓ arts centre
- ✓ super-store

New UK
Exascale
Supercomputer

will be located
at Edinburgh
University

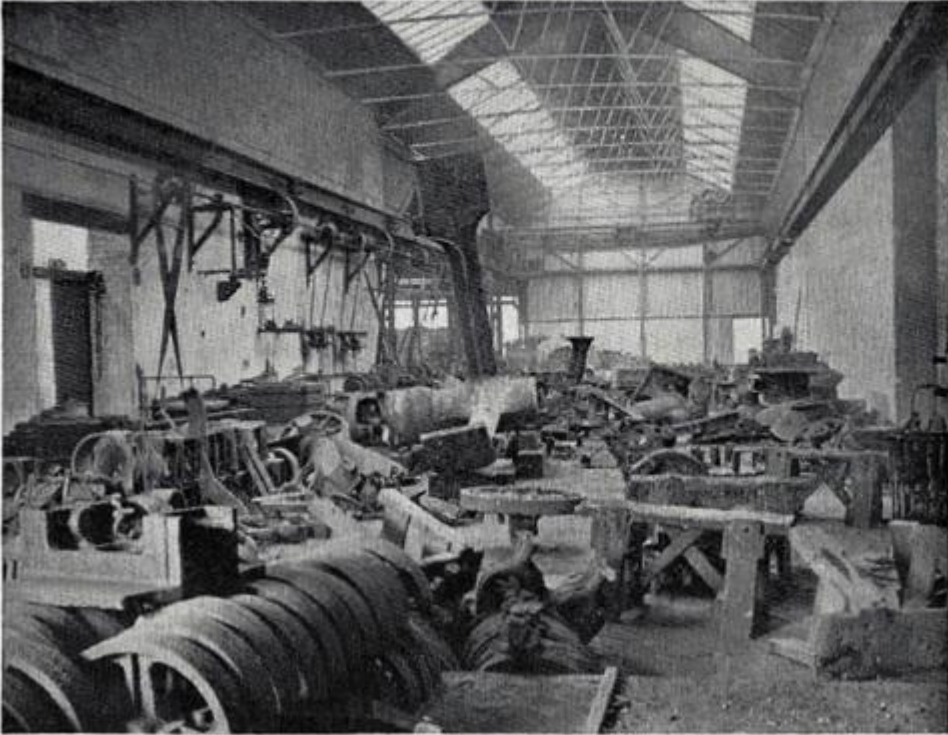
and consume
50 GWh/yr
renewable
electricity

and...



(across the river)

THE NATIONAL STEEL FOUNDRY, Ltd.



Kirkland Works,
LEVEN,
FIFE, N.B.
Telegrams—
"Castings, Leven."
Telephone—93 Leven

Steel Castings
of every description
FOR
**LOCOMOTIVES,
SHIPBUILDING,
SUGAR MILLS,
COLLIERIES,
HYDRAULIC,
ELECTRICAL and
GENERAL WORK.**

*On Admiralty and
War Office Lists.*

London Office:
28, Victoria St, s.w.
Telegrams—
"Favoured, London."
Telephone—5232 Victoria.

- sail cloth works
- iron foundry
- own gasworks
- and cyanide manufactory (for export)
- adj. coal bing
- raised landfill
- deprived area (low house prices)

SGN
H 100 Fife



Our team...



Shared
Services
Agreement:
equipment
& hours

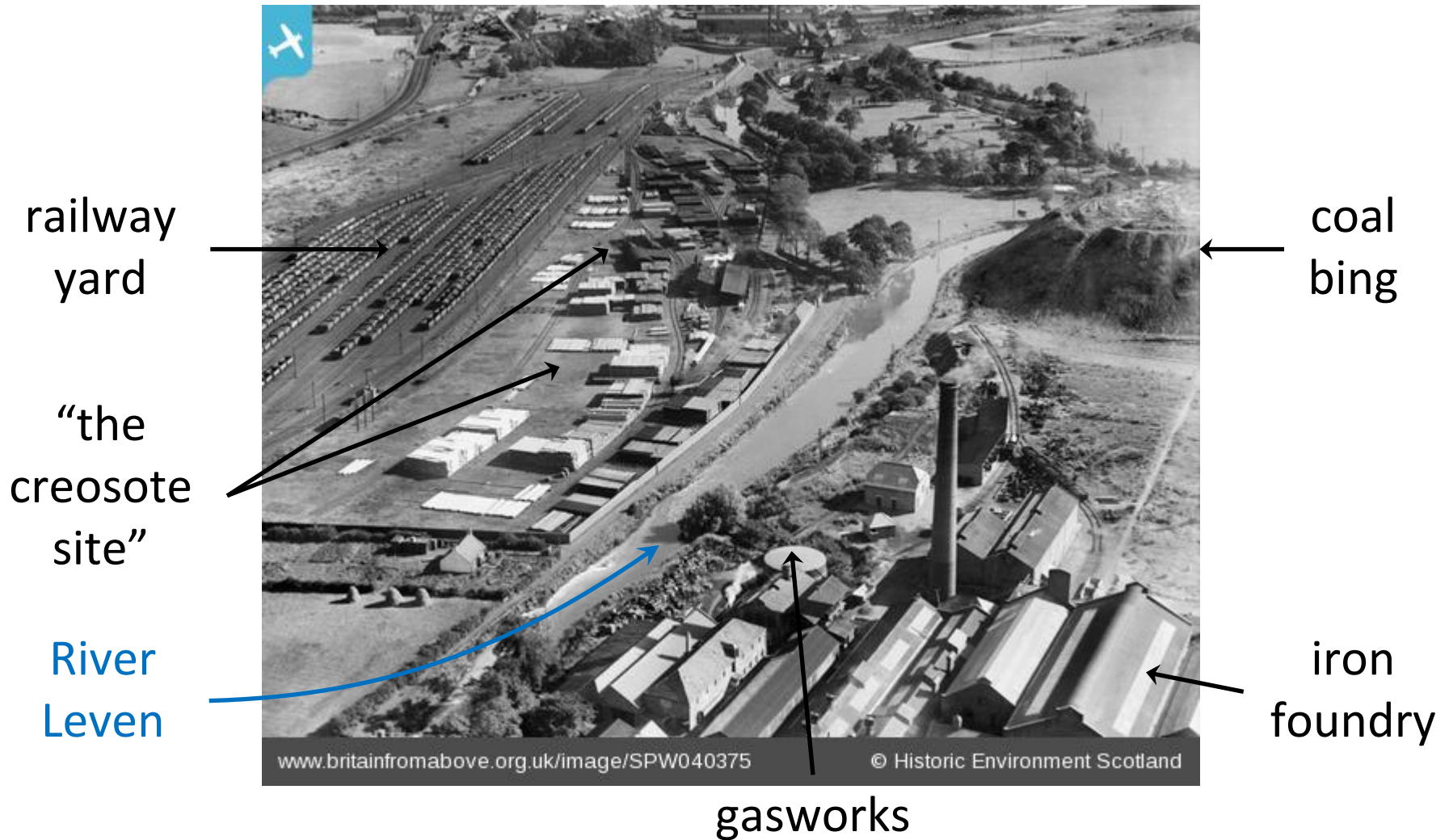
Awards:



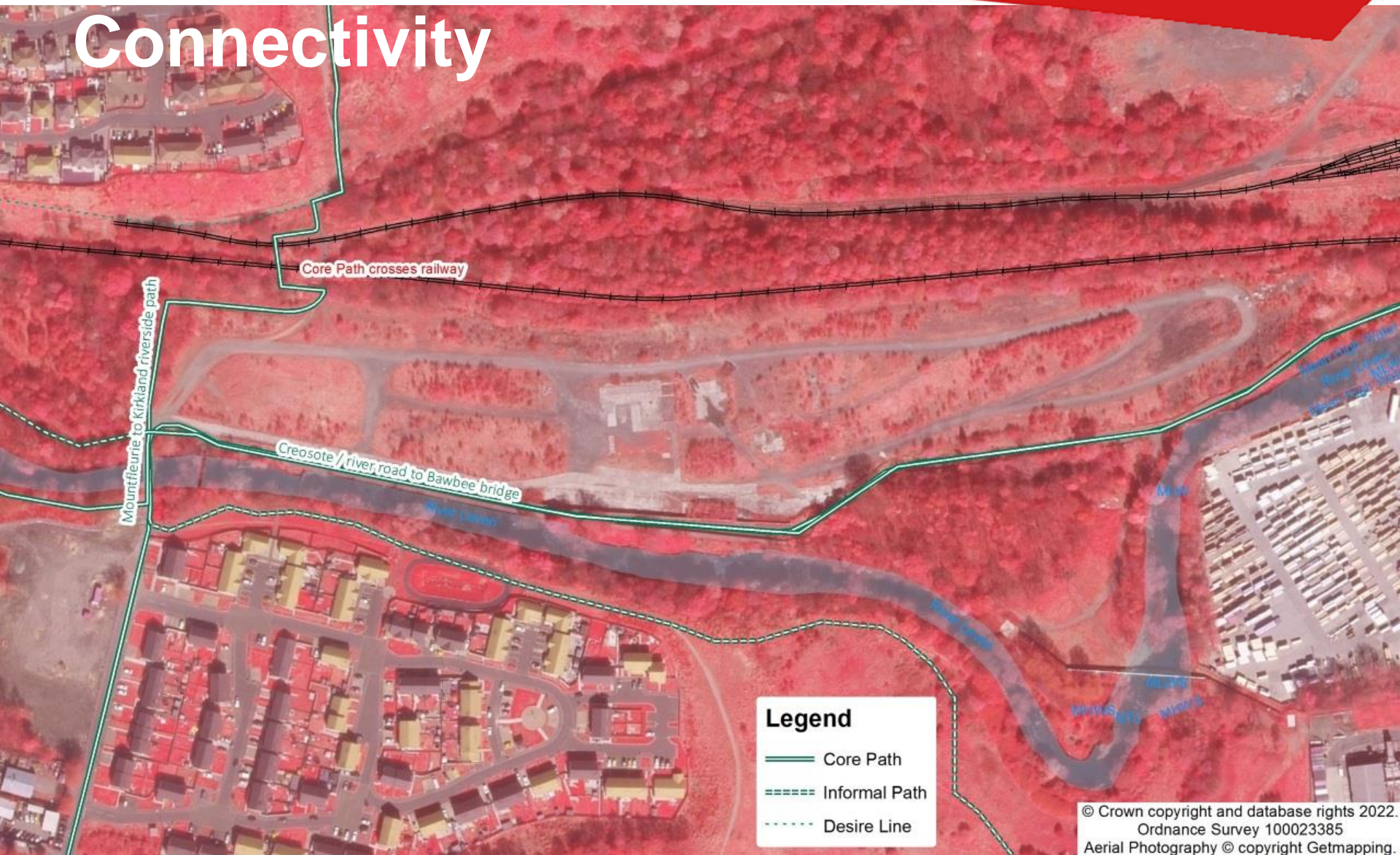
Case Study

- *Can local authority officers be proactive ?*
- *Do electricity turbines slow down the wind ?*
- *Does hydrogen production compete for water ?*

Case study site



Connectivity



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Sustainable Investigation

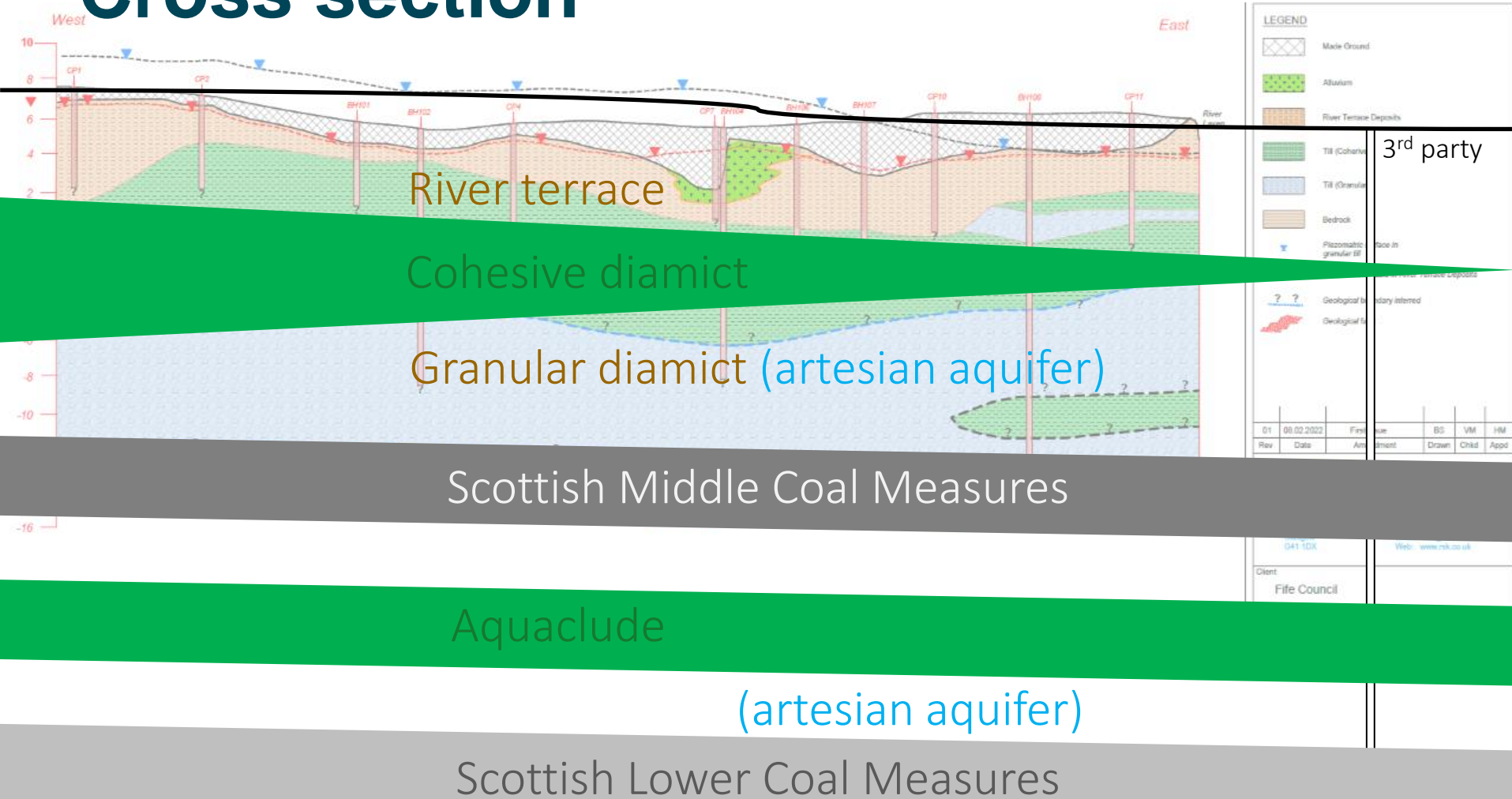
1. Minimising time and waste:
 - Sonic drilling
 - Low-flow sampling
2. Considering on-site soil improvement
3. Reviewing the implications of remedial action



- Design, planning & implementation



Cross section



mine water pumping →

Flood risk



Legend

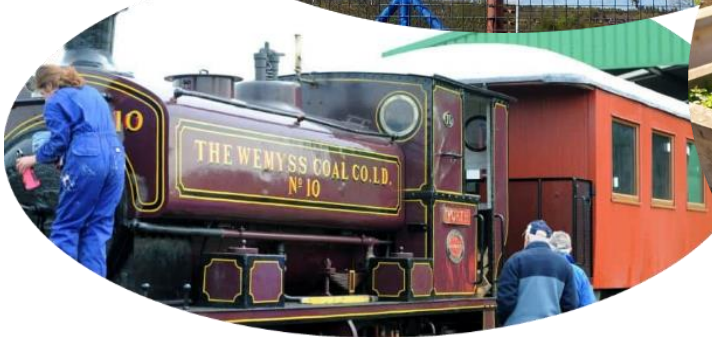
- Flood 2014 Coastal Ext 10Yr
- Flood 2014 River Ext 10Yr

+ climate change

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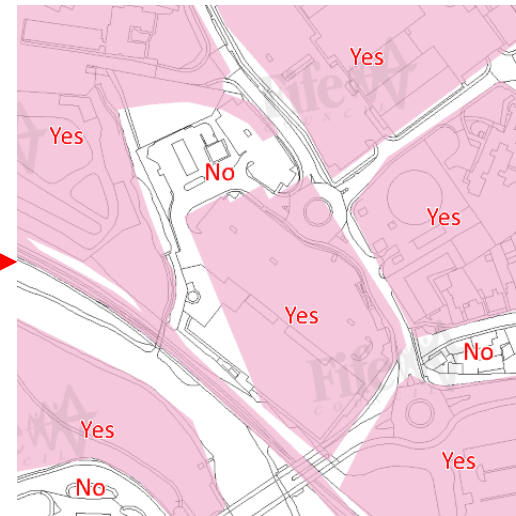
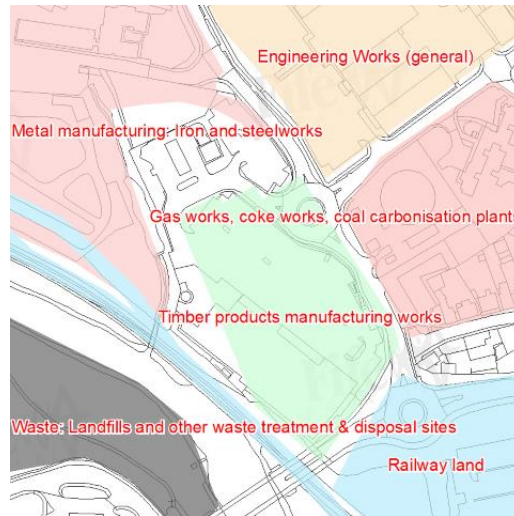
Case study actions

1. Need a decision on proposed end use(s) before proceeding to detailed quantitative risk assessment
2. But any proposals will have sustainability at the heart of the decision-making process, for example:
 - The design can be adjusted to place sensitive land uses in areas where little or no treatment would be required...
 - Soils can be improved onsite through the addition of *eg.* biochar and/or free compost sourced from the council's AD plant 😊
 - What's the point of breaking out perfectly good concrete hard-standing when some end uses would probably benefit?
3. Dereliction in the heart of the community: surely there is no better candidate for bringing land back into beneficial use.



Communicating...

“we’ve given you access to our data”



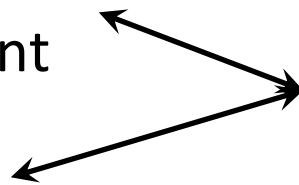
“too much info! consult yes, or no?”

Pamela

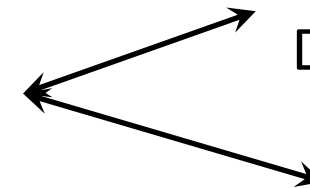
Economic
Development

Local
Office

Dave



Land & Air
Quality Team



Planning
Department

Building
Control

Gillian

Alan

Dr Donald Payne

donald.payne@fife.gov.uk

Land & Air Quality, Fife Council

www.fife.gov.uk/contaminatedland

03451 555555 ext. 440459

After the Renaissance,

“nature became a commodity and an
obstacle to human progress”

People sometimes view nature with pity but always from the outside;
indigenous people always see it from within:

“in [nature] I find my legs are also the
path they walk upon”

- Eduardo Galeano, open letter, April 2010