
DBDH

How high IRR jeopardizes city wide DH systems

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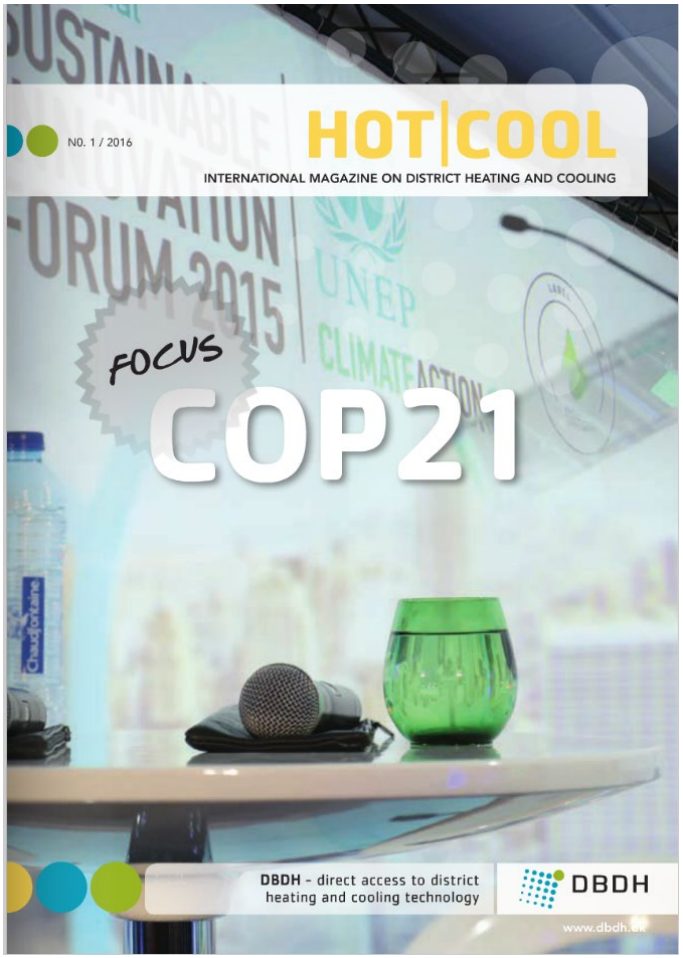
DBDH

Promote District Energy for a Sustainable City Transformation

- Established in 1978
- 75+ members
  - Leading actors in Denmark
  - 2/3 Manufacturers, Consulting Engineers
  - 1/3 Utilities
- Magazine HOT|COOL
- Seminars, training, exchanges of know-how in DK and abroad
- www.dbdh.dk



Todays menu – 2 main courses

How a city-led ESCO would “use” the difference in IRR

How high IRR jeopardizes city wide DH

Disclaimer ☺

- Not a guide to which business model is the best or most relevant in different countries or under different framework conditions
- We assume that a *commercial ESCO* would need an IRR at 14% and a *council led ESCO* would need 4%
- Both company types are well-managed, well-structured, well-….
- The price of heat is the same

More disclaimer

Definition: "Internal rate of return (IRR) is a metric used in capital budgeting to estimate the profitability of potential investments. Internal rate of return is a discount rate that makes the net present value (NPV) of all cash flows from a particular project equal to zero."

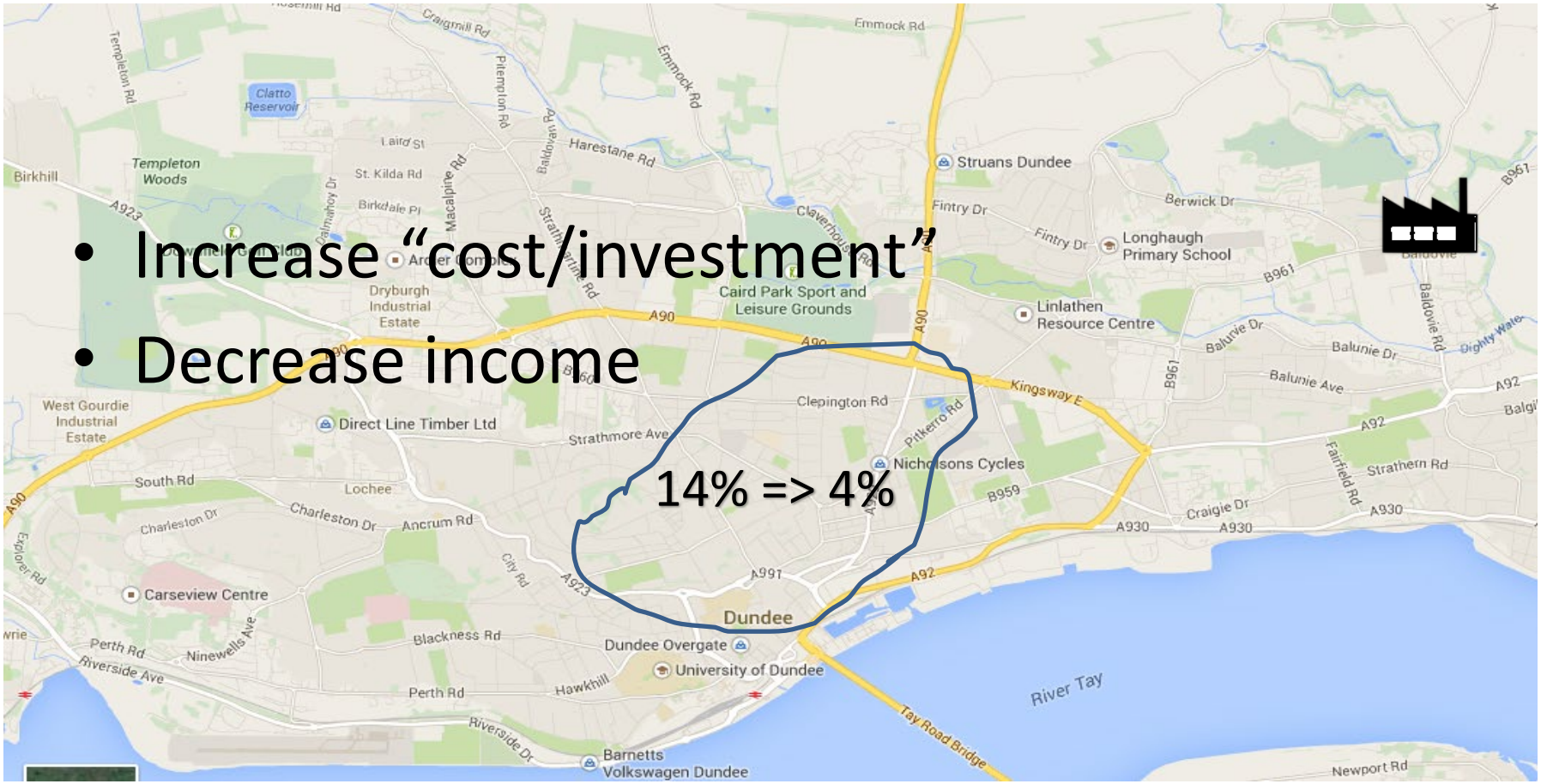
Here we only touch up-on (the no-dessert rule):

- Depreciation time may be different
- Political/social aspects: e.g fuel poverty, control of city development
- Consequences of DIFFERENT owners of DHS in the same city

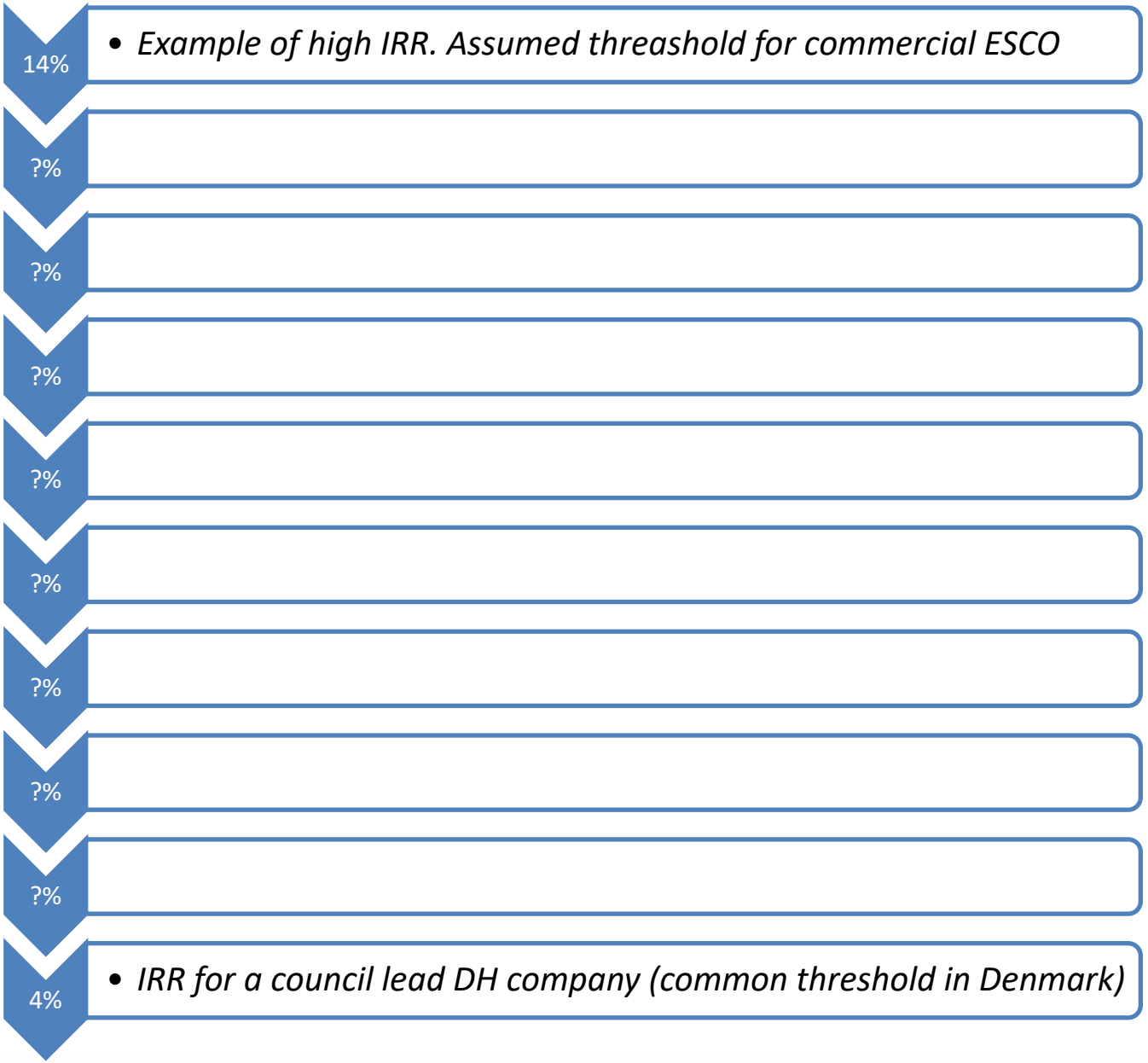
Also very relevant discussions – but in the coffee break ☺

How a city-led ESCO would “use” the difference in IRR

2 possibilities to lower the IRR



How would a city lead ESCO progress with a high IRR project?

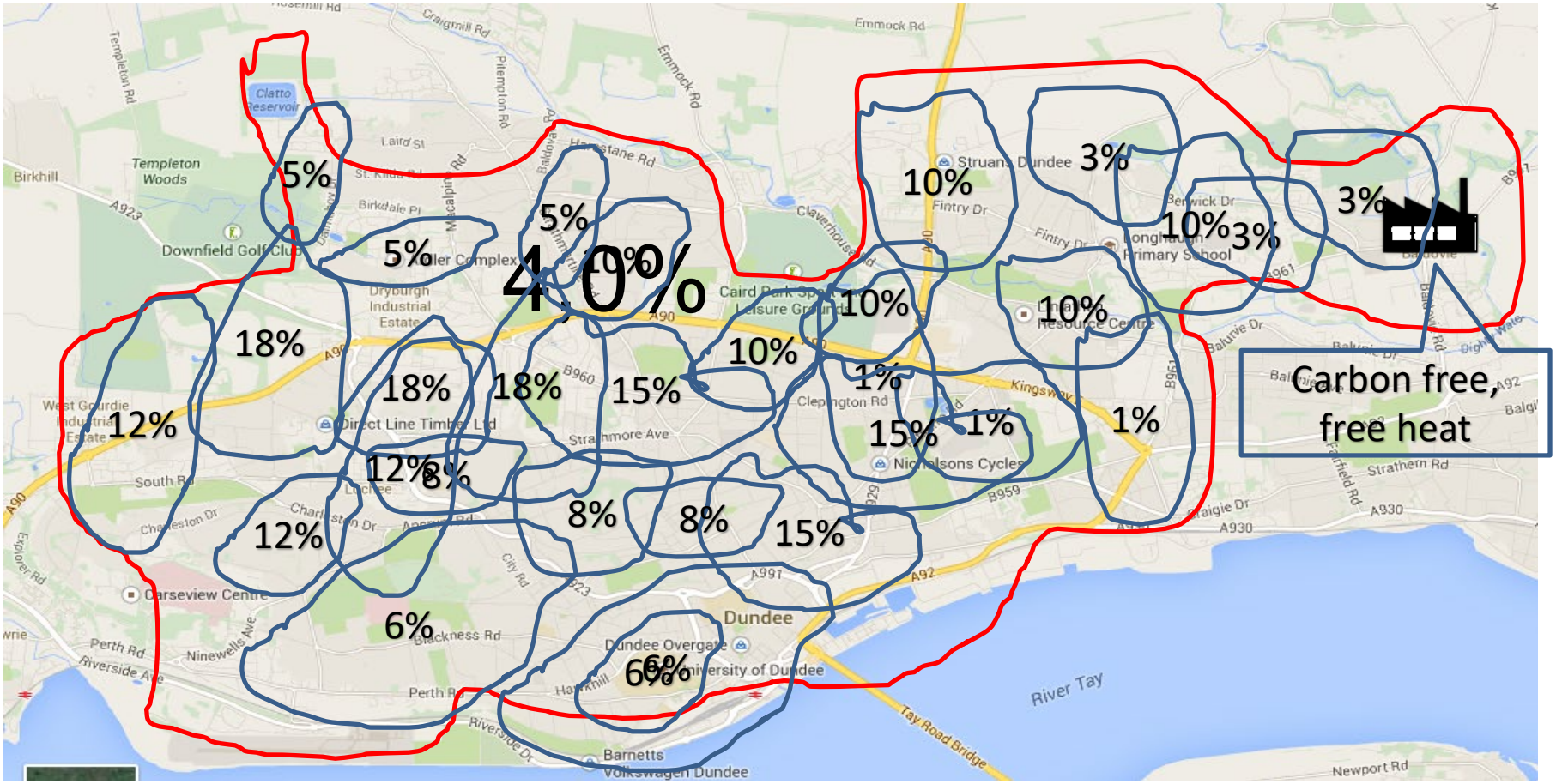


How high IRR jeopardizes city wide DH systems

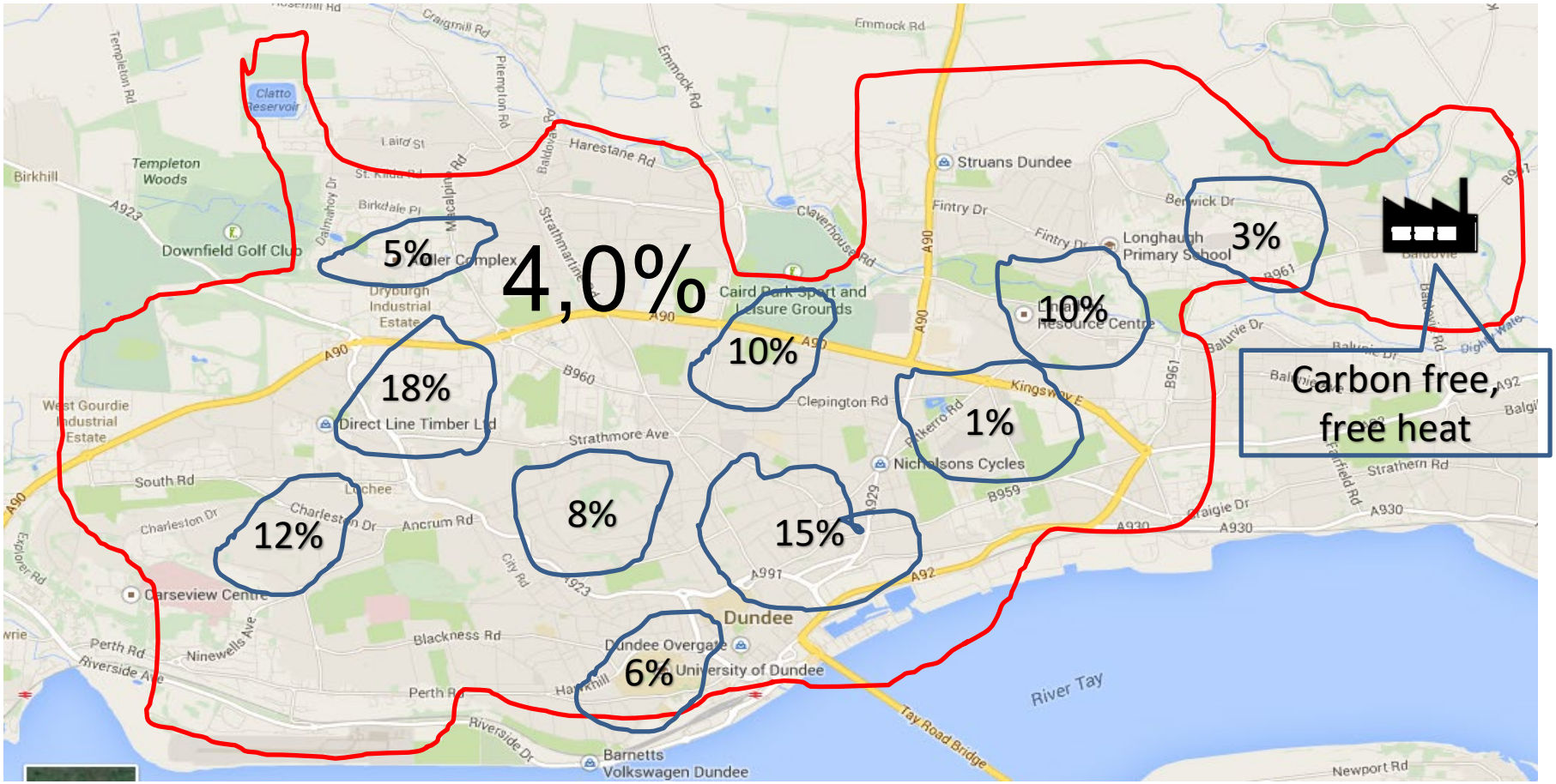
Low ha

We want all the apples!

IRR for DH in the whole city

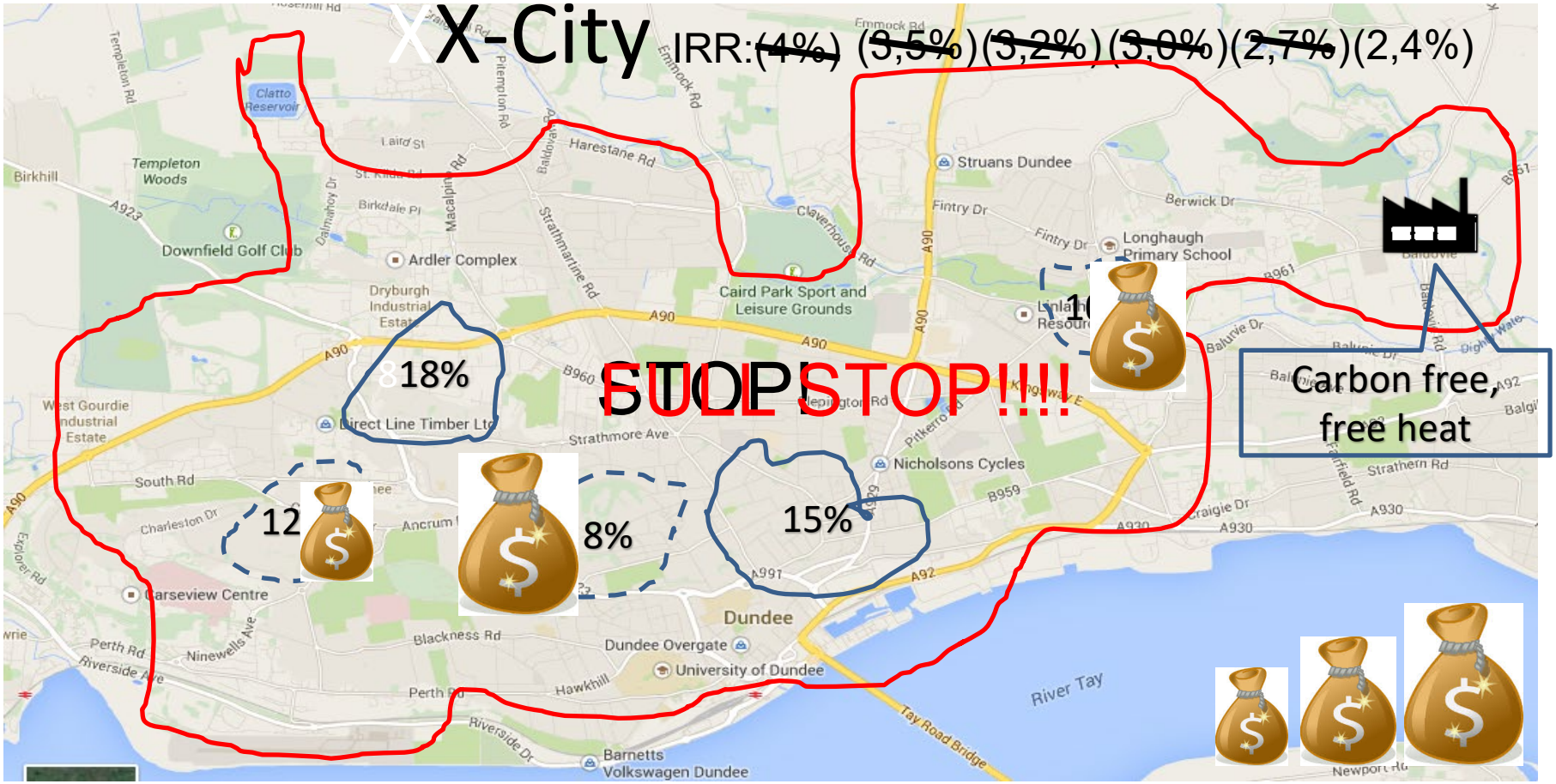


IRR for DH in the whole city

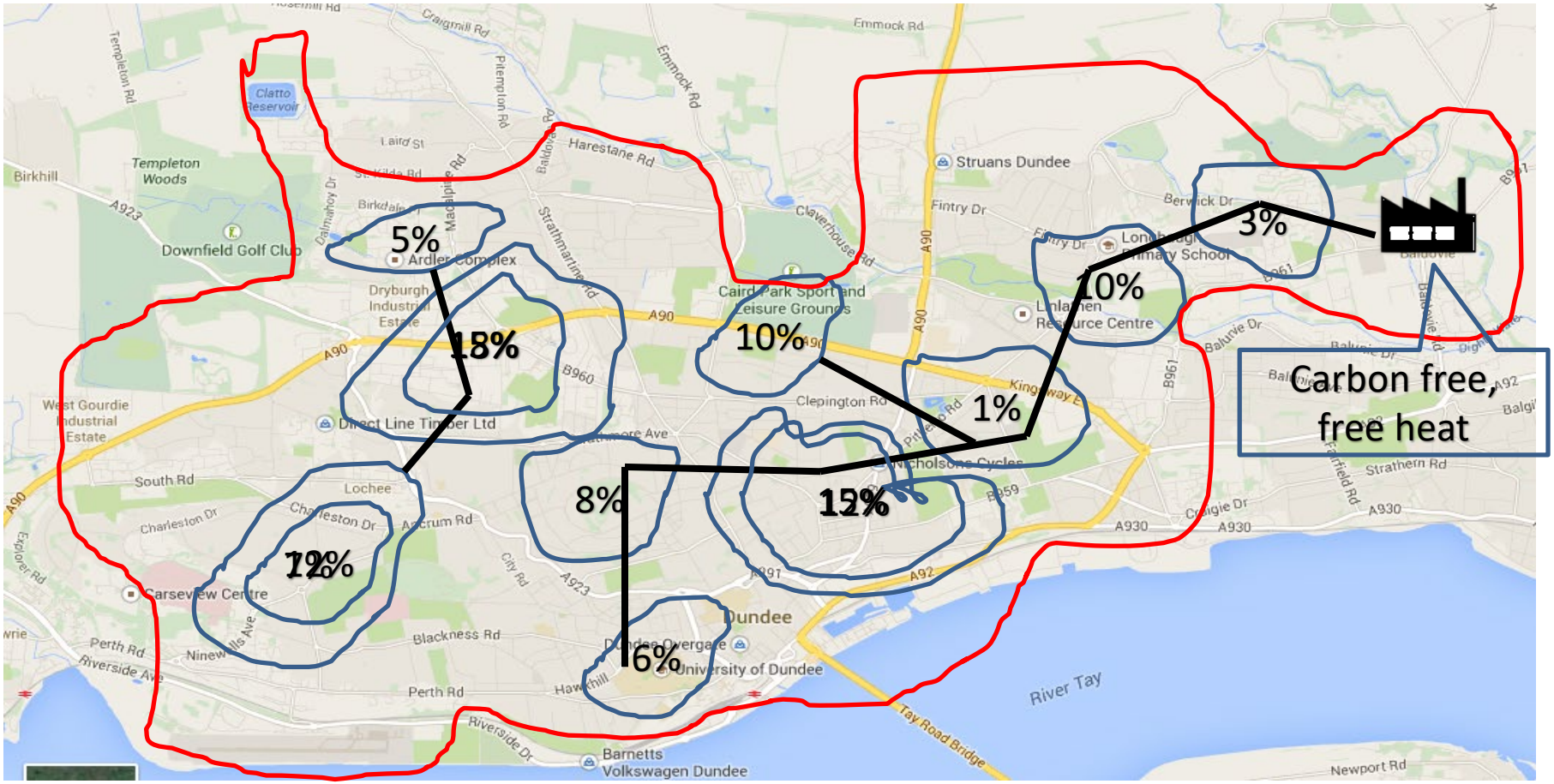


Commercial ESCO

Consequences on IRR. Threshold: 14%



City owned ESCO
Threshold: 4%!



Conclusion

- High IRR = less DH
- Find out what you want
- Consider your business model carefully

Thank you

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