Context

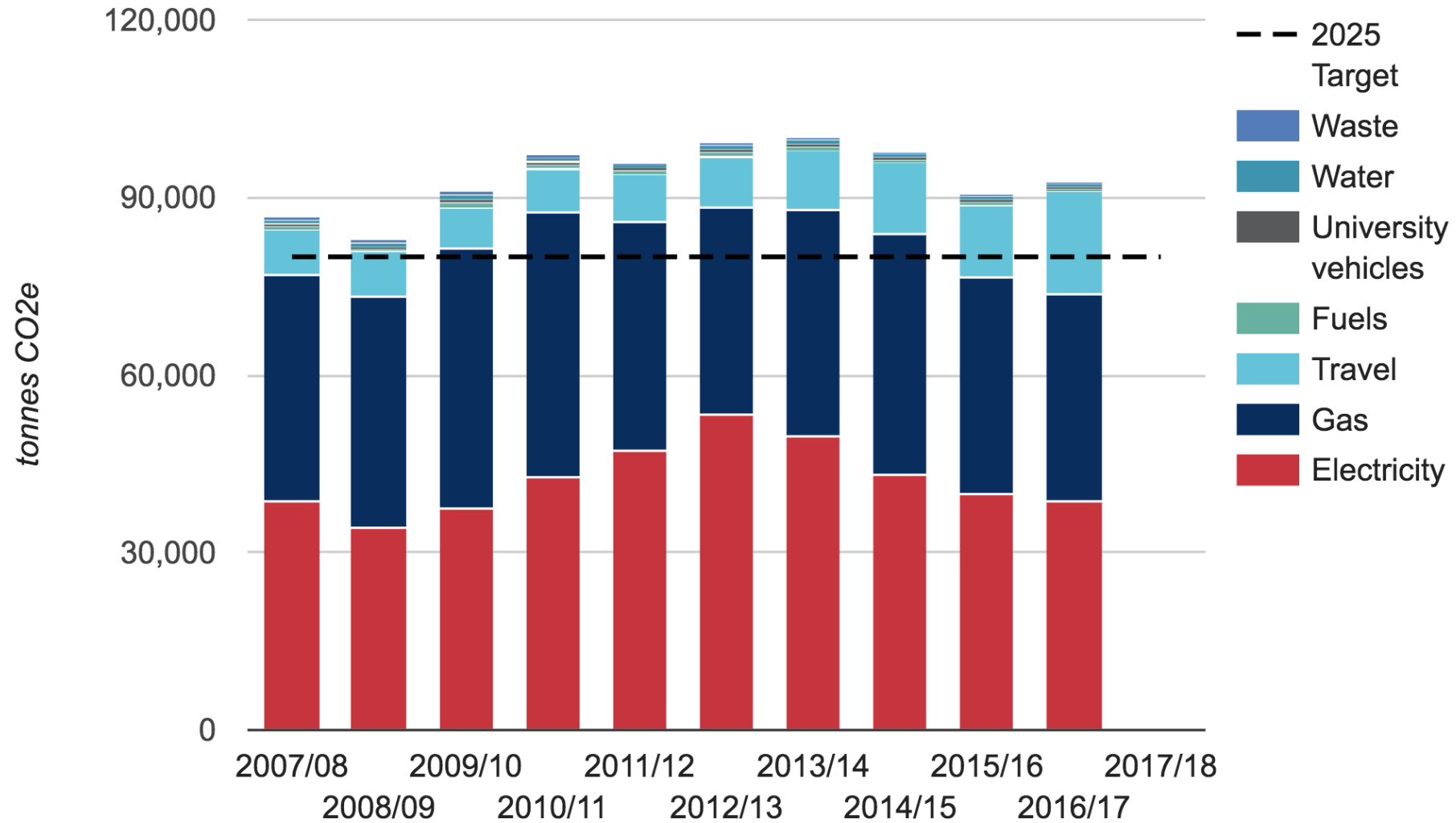We're a big, complicated and **international** University…

Progress with a focus on energy

- **£4 million Sustainable Campus Fund**

- More than **£20 million invested in low-carbon energy** on campus

- **100% zero carbon electricity tariff** (but that doesn't count)

- **Divested** from fossil fuel investments

- **Extensive review** of renewables ongoing

Carbon emissions by type (2007-17)

Legend:
- 2025 Target
- Waste
- Water
- University vehicles
- Fuels
- Travel
- Gas
- Electricity

y-axis: *tonnes CO2e*

y-axis values: 0, 30,000, 60,000, 90,000, 120,000

x-axis: 2007/08, 2008/09, 2009/10, 2010/11, 2011/12, 2012/13, 2013/14, 2014/15, 2015/16, 2016/17, 2017/18

Our reporting challenge

We knew emissions from travel were high,
but couldn't easily analyse them

- Existing system took **6 weeks** to **guess** our business travel emissions

- Staff often didn't enter easy to read origins and destinations

- A lot of time was spent **finding and correcting mistakes**

The solution

We spent 8 weeks to create a new system to automate the analysis of our business travel data

- Completely new approach – understands the text staff enter

- Takes hours not weeks to process data

- Automatically created report so staff can see their department's emissions
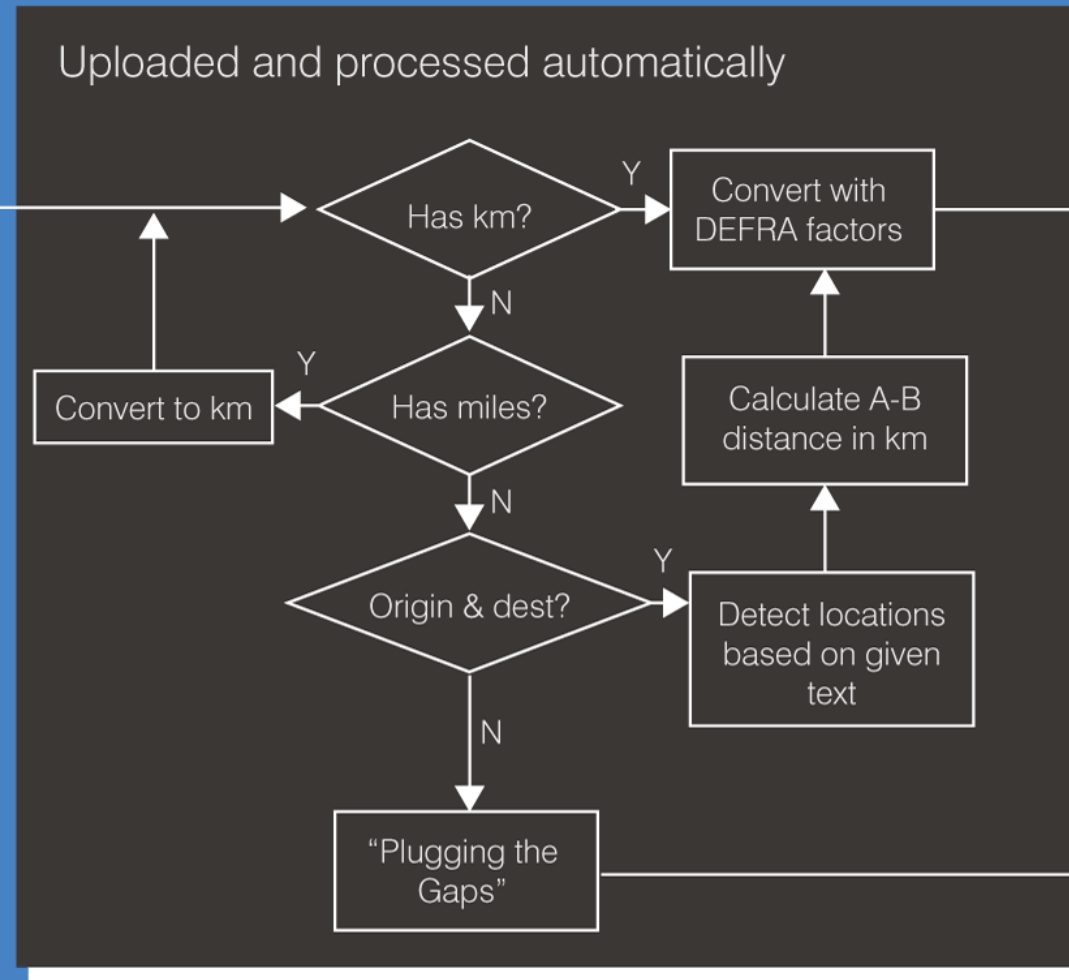
How it works

Key Travel
Taxi firms
Car rental
Expenses
etc...

Standard import format for incoming data

1-2 hours work

Uploaded and processed automatically

Has km? — Y → Convert with DEFRA factors

N

Has miles? — Y → Convert to km

N

Origin & dest? — Y → Detect locations based on given text → Calculate A-B distance in km

N

"Plugging the Gaps"

Runs overnight (6-12 hours)

Business Travel report including flight map

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www.edin.ac/business-travel-report

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What the data means

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What the data means

Managing business travel carbon will be a challenge

- Bad news

    - We are seeing huge growth in business travel costs and emissions

- Better news

    - Flights are in decline as a percentage of domestic travel

    - Domestic rail has doubled in 4 years, domestic flights are almost static

- Most emissions growth comes from European and long haul travel

    - Still, London remains an opportunity to cut ~1% from our emissions

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Is this a useful system?

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What are the next steps?

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Why do staff travel?

We got some very frank answers

- Because they needed to go

- But also sometimes…

  - They were told to go

  - Because they feel travel is needed for promotion

  - There was a budget that had to be spent by a certain date

  - Other colleagues were going

Why do staff fly to London?

It's not as easy as saying *"staff should always take the train"*

- There isn't a train that gets there by 9am

- They didn't even think of booking a train

- Don't like using Key Travel

- Feel it's too expensive

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What could we do about it?

We researched and proposed a series of potential options

Proposed interventions

- Advice to staff

- Video conference training

- Support for planning trips

- Voluntary face-to-face seminars

- Voluntary training for staff who book travel

- Private 'league table' or benchmark

- Mandatory training for staff who book travel

- Public 'league table' or benchmark

- A voluntary carbon offsetting scheme

- A mandatory carbon offsetting scheme

- A policy recommending train to London

- A policy requiring train to London

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Proposed interventions

- Advice, voluntary training and recommending the train to London are non-controversial

- Academics are strongly opposed to a policy limiting flights to London

- Academics are surprisingly supportive of a mandatory carbon offset.

Intervention	Weighted score	Expected impact
a) Advice to staff	3.0	Low
b) Video conference training	1.6	Low
c) Support for planning trips	2.2	Low
d) Voluntary face-to-face seminars	1.3	Low
e) Voluntary training for staff who book trave	2.5	Low
f) Private 'league table' or benchmark	1.0	Low
g) Mandatory training for staff who book trav	-0.1	Moderate
h) Public 'league table' or benchmark	0.0	Moderate
i) A voluntary carbon offsetting scheme	1.4	Low
j) A mandatory carbon offsetting scheme	0.4	High
k) A policy recommending train to London	2.4	Moderate
l) A policy requiring train to London	-1.2	High

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Our final proposals to pilots

- **Mandatory online training**

- **Mandatory train to London**
  (unless the staff member can prove a reason to fly)

- **Automatic carbon compensation on flights**
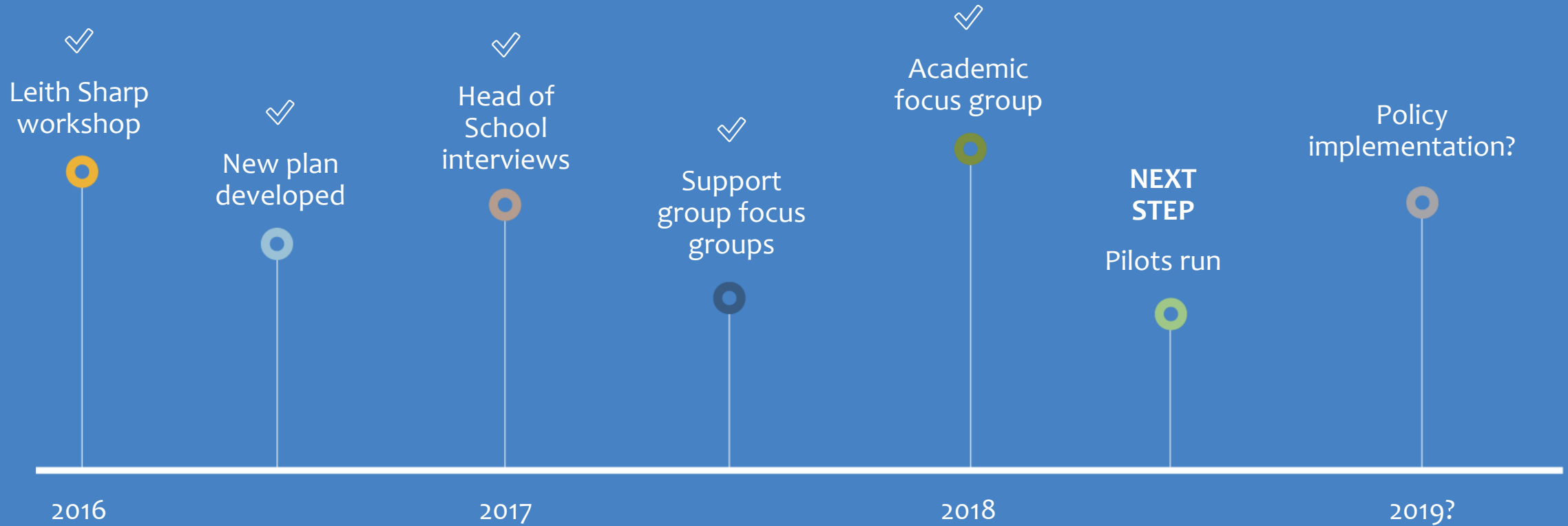 (£25 to London, £35 in Europe, £50 rest of the world)

Plus we're also testing (everywhere)

- **Staff pledge to fly less** (with some sort of benefits)

- **Changing internal grant criteria** (with IAD)

- **Public business travel reports** (from late summer)

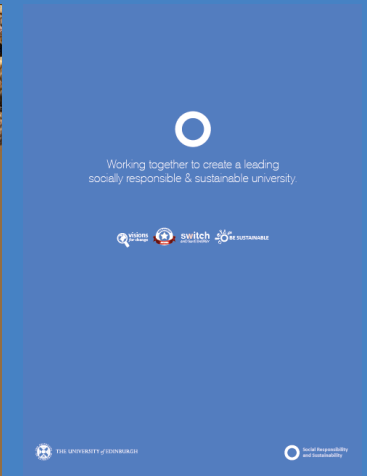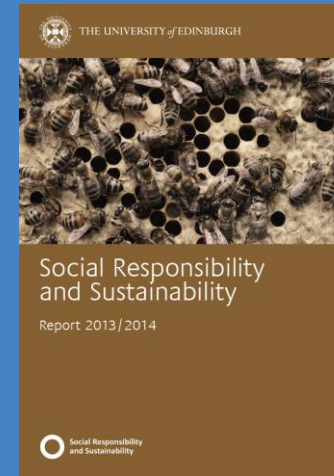- **Training that encourages taking the train**

Process

Leith Sharp workshop

New plan developed

Head of School interviews

Support group focus groups

Academic focus group

NEXT STEP

Pilots run

Policy implementation?

2016

2017

2018

2019?

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Questions?

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