

Energy Inputs industry 昌昌 high coal urban centres voltage! 1 businesses nuclear 田田田田田 gas raw renewables materials building management demand response mechanism aluminium regional residential national 中国口 Steel transmission district solar 中国口 networks 口口 network 口 homes hydroelectric concrete plastic Offshore wind

WHO REGULATES AND INFLUENCES?

- Treasury, DECC, CCC,
 Ofgem, EU Over 30
 bodies are responsible for
 energy policy.
- The networks are regulated monopolies
- Big Six Energy Companies, DNOs, planning authorities, investors, and lobby groups are all influential

££ WHO IS MAKING MONEY AND HOW?

Most of us buy our energy from one of six large suppliers who dominate the market. However there is a growing number of city-specific and community energy projects. Construction and service companies build and manage energy infrastructure like power plants.

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Future Challenges: How to keep our supply secure, keep energy prices low, push low carbon; our houses are inefficient; variable local support for technologies like fracking, nuclear, onshore wind.

Itarmina. Processing take-away 0 Input Transporting Supermarket sophisticated flavourings water Soil methane

WHO REGULATES AND INFLUENCES?

- Regulation pushes industrial agriculture, and growing more food
- Big retailers
- Food standards agency, media, immediate social network
- Brands, Big traders
- 'food celebrities' (e.g. Jamie Oliver)
- EU Common Agricultural Policy

££ WHO IS MAKING MONEY AND HOW?

We buy most of our food for the home from the big supermarkets and branded manufacturers like Heinz, and spend additional money on eating out.

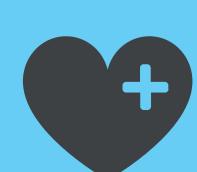
Food processors make money in processing food, both for shops and restaurants.

Additional companies supply food at large scale to businesses.

Future Challenges: Using too much water, polluting soil and water, using fossil fuels, carbon dioxide and methane gas emissions, overuse of antibiotics in animal feed. Our system is vulnerable to supply shortages e.g. in droughts.

consuming

cities

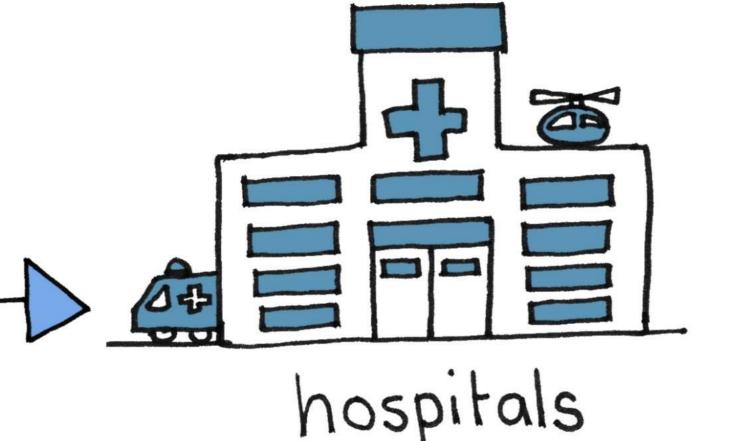


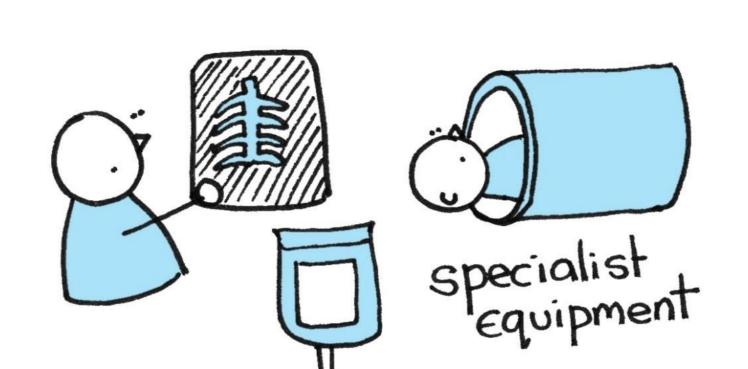
Services

rescources+ technology

WHO REGULATES AND **INFLUENCES?**



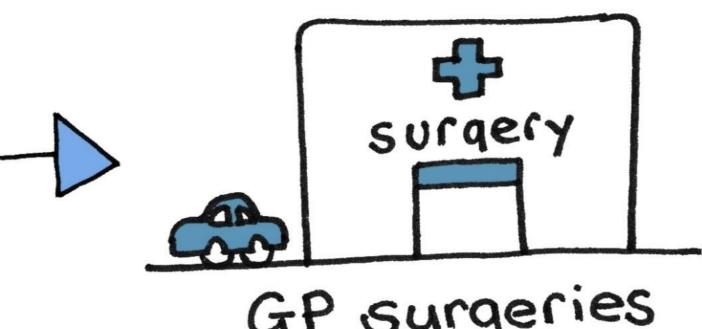






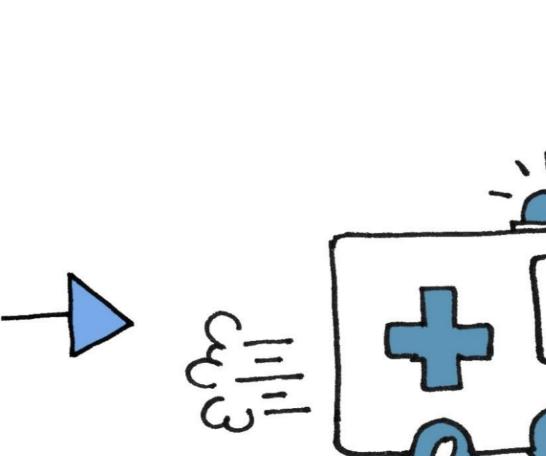
Each UK country's system is accountable to each country's government













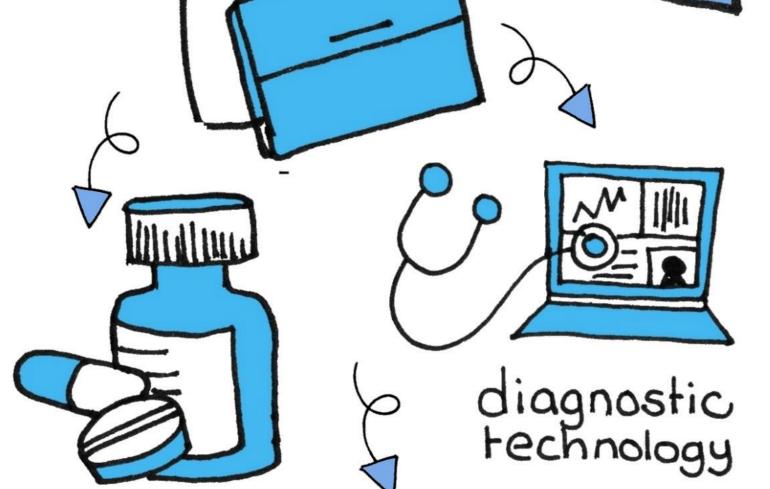








technology

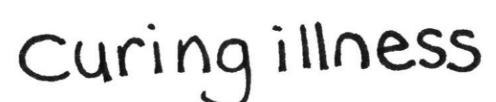


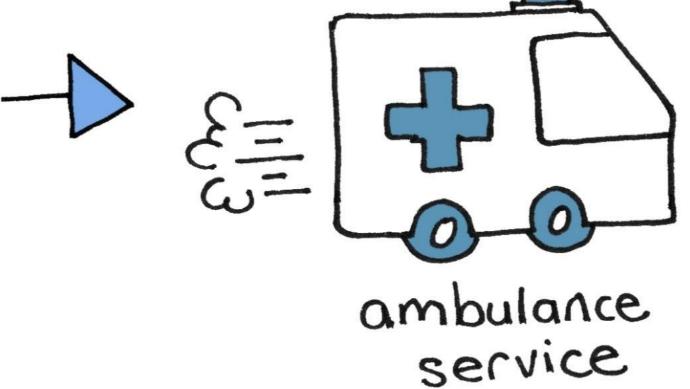
patients

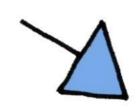
outside business













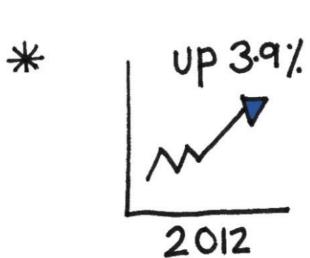


££ WHO IS MAKING **MONEY AND HOW?**

The NHS provides healthcare services for free, funded mostly by central taxes. Charging is sometimes allowed by parliament, such as prescriptions or going to the dentist. Some people choose to use private healthcare providers who charge a fee for a better service (e.g. private hospital rooms, shorter appointment waiting time). Sometimes these providers use NHS staff and expertise.







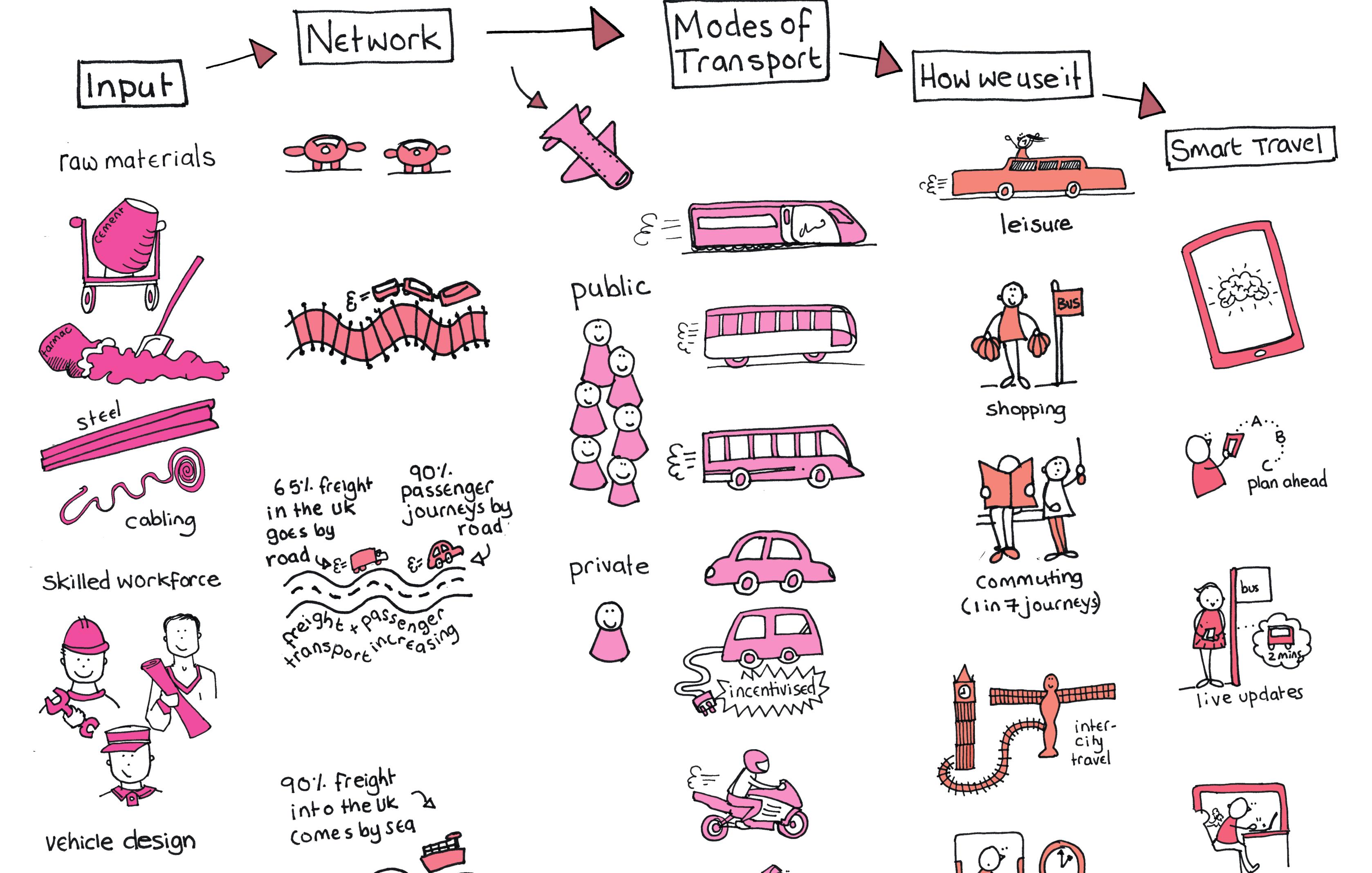


2013

Future Challenges: Care costs more and more, ageing population – government funding may be cut – there are more chronic diseases – resistance to antibiotics



- RRim



WHO REGULATES AND INFLUENCES?

- Strategic Road Network: regulated by Office of Rail and Road
- Network: owned and maintained by Network Rail
- Urban roads: maintained by local authorities
- Motorways / trunk roads: maintained by Highways England.
- Environmental emissions: set by EU

££ WHO IS MAKING MONEY AND HOW?

Private operators run the train and bus services, although these are paid for in part by us as taxpayers.

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Five operators deliver the majority of our rail and bus routes.

Congestion charging raises money for transport infrastructure in London. Car companies. Construction and service providers.

Working

while

travelling

travel 1 hour

a day (average)

Future Challenges: Rail network struggling to meet expectations. Growing population, road congestion, greenhouse gas emissions and pollution. How to integrate different modes of transport.



WHO REGULATES AND INFLUENCES?

- Waste management laws stop dispersal of waste into environment
- EU directives translated into UK statutory instruments
- Waste policy decided by DEFRA
- Environment Agency,
 Scottish Environment
 Protection Agency, NI
 Environment Protection
 Agency

££ WHO IS MAKING MONEY AND HOW?

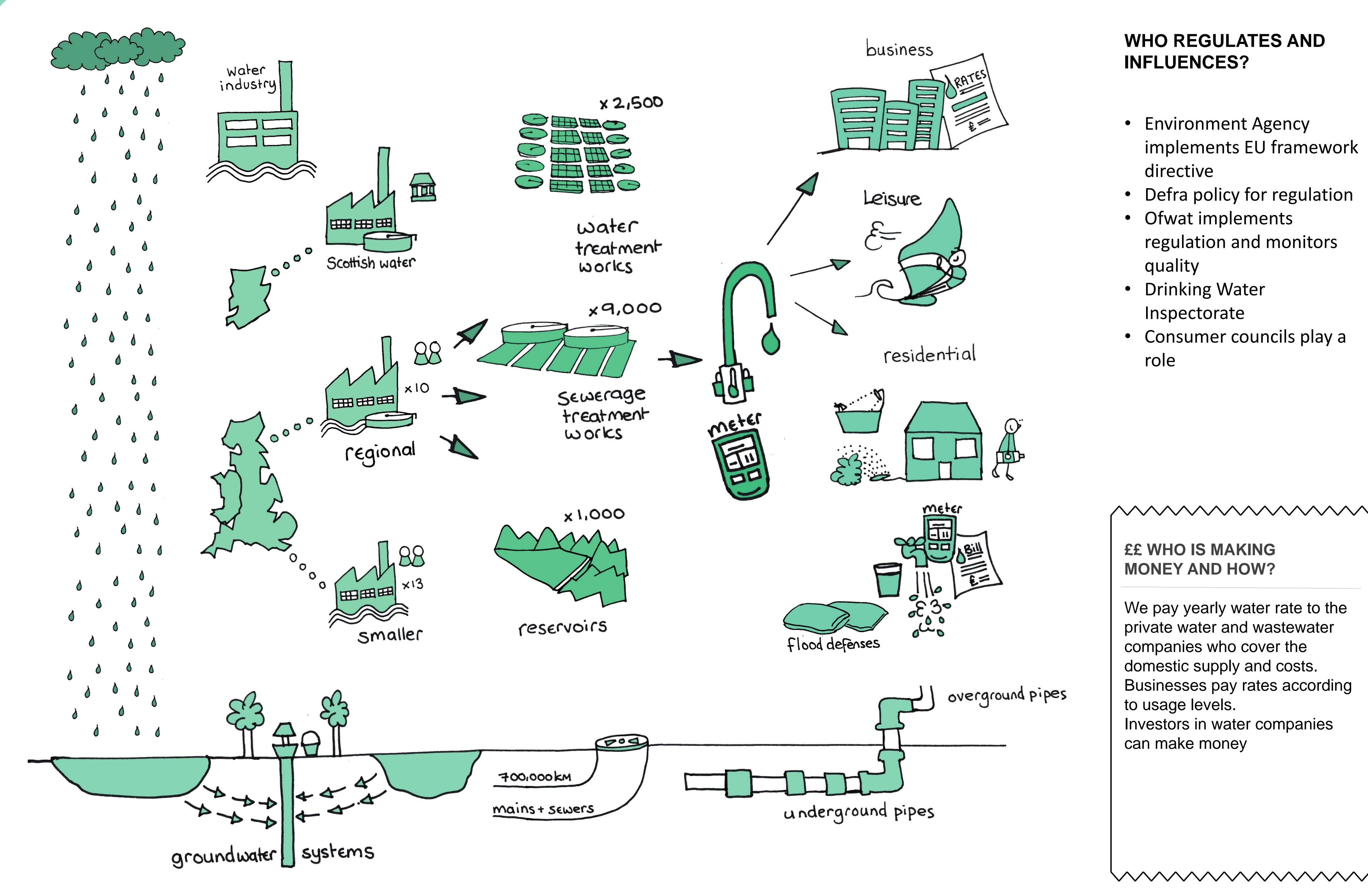
consumers

contract companies, recycling plants, etc.
Businesses pay private companies who specialise in specific waste collection and reprocessing e:g food waste and costs are eventually paid by

We pay tax to local councils who

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Future Challenges: More consumption means more waste; carbon emissions; need to improve 'closed loop' products and services



WHO REGULATES AND **INFLUENCES?**

- Environment Agency implements EU framework directive
- Defra policy for regulation
- Ofwat implements regulation and monitors quality
- **Drinking Water** Inspectorate
- Consumer councils play a role

££ WHO IS MAKING **MONEY AND HOW?**

We pay yearly water rate to the private water and wastewater companies who cover the domestic supply and costs. Businesses pay rates according to usage levels. Investors in water companies can make money

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Future Challenges: Global water scarcity, which also affects food imports, food uses a lot of water and UK imports 40% of its food; Flooding; pollution from agriculture and industry; people using too much water; the pipes and sewers needing upgrades; price rises