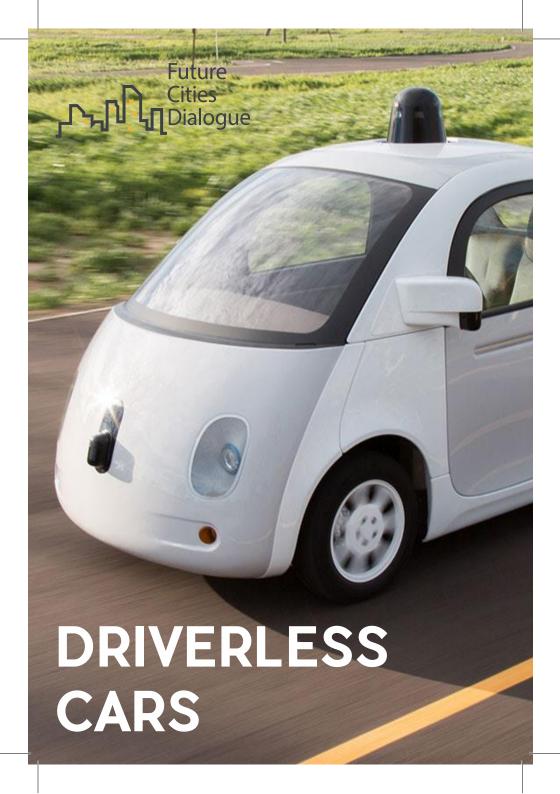




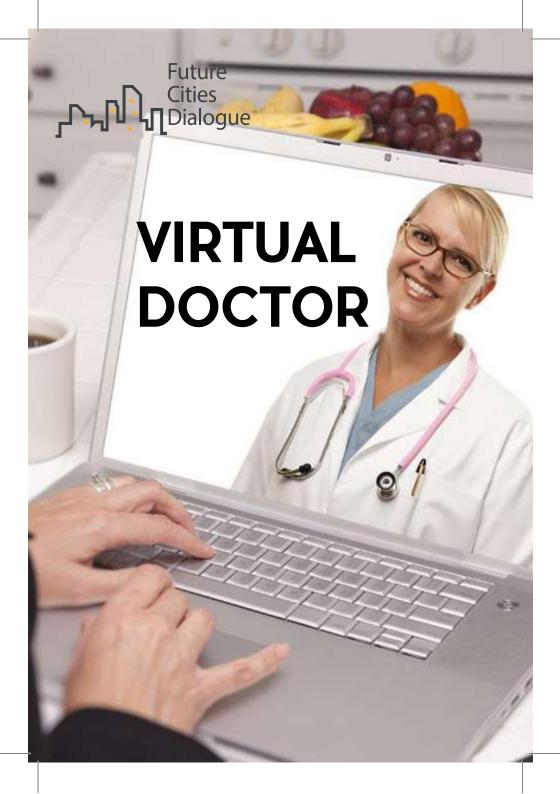
PORTABLE BATTERY PACK

- Small and portable battery packs which can be strapped onto energy generating devices like bicycles, scooters, even your legs.
- They capture the energy so that it can be stored and you can use it later for other purposes



DRIVERLESS CARS

- Personal or private (e.g. taxis) cars that do not require a driver
- They detect their surroundings using technologies like radar and GPS, and then use advanced control systems to interpret that information and decide on a navigation path
- Means there is less demand for driving jobs
- Can reduce congestion and road accidents



VIRTUAL DOCTOR

- Personal health data (what you eat, your exercise levels, your medical history, your age and family health history etc) is collected and constantly fed into predictive algorithms, which can give more precise health assessments for you.
- You get a diagnosis from a virtual "doctor" - that can be accessed from your home or in a walk-in centre and then get a prescription delivered to your home.
- Provides an affordable form of healthcare



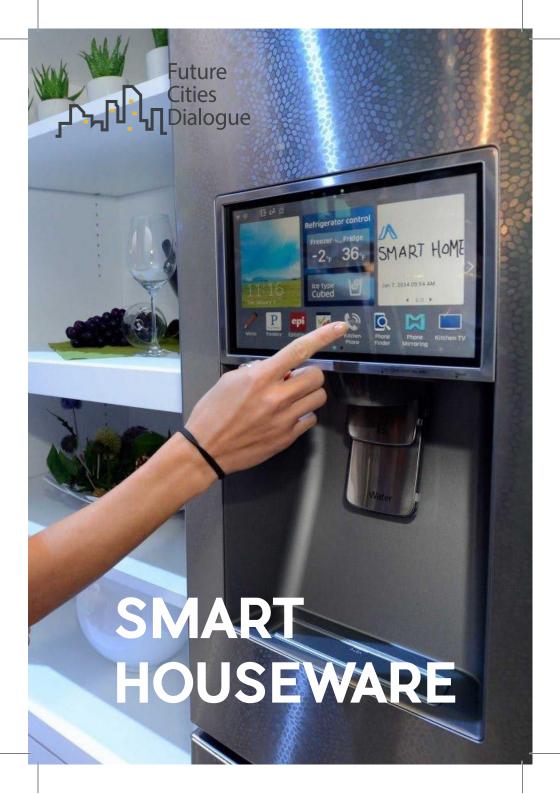






DRONES

- Unmanned aerial vehicles that are used for a variety of different reasons:
 - Can be programmed to deliver items e.g. fruit/veg from the community farm to your home
 - Delivering food and medicine to you.
 - Communicate with the power grid, replacing street lights when they go out.
 - Gather information about traffic, flooding, disease vectors, crime, and other helpful information that can be reported back to authorities and residents.



SMART HOUSEWARE

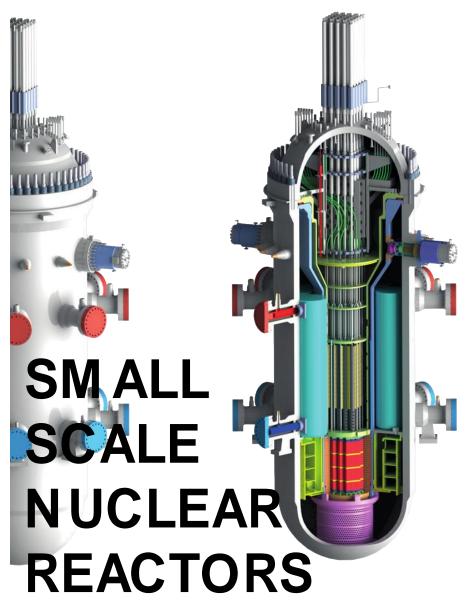
- Our fridges, TVs, waste bins and heating systems can communicate with the internet.
- For example, your fridge tells you when you're running low on something, and can be programmed to automatically reorder it
- It also allows very flexible demand management e.g. you pay a lower price for energy during periods of lower demand.
- They can nudge appropriate behaviour –
 e.g. offering a recipe for using ingredients
 in the fridge; or warning that some food
 has gone off and information and advice to
 help continual 'offenders' cut down on food
 waste



PERSONAL HEALTH TRACKERS

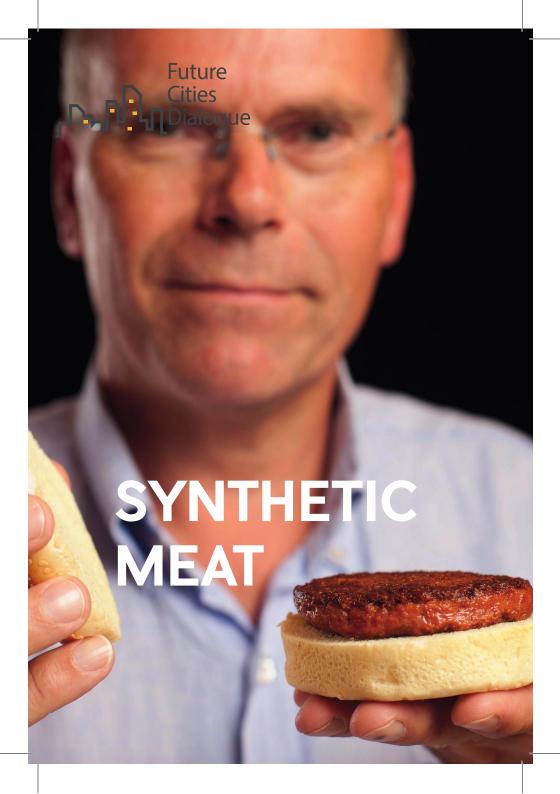
- Personal health trackers are worn and link remotely to health services.
- They can be in the form of a wristband, clothing or jewellery
- They can:
 - Encourage you to move and not be dangerously sedentary e.g. give a reminder if you have been sat still for too long.
 - Call ambulances if you are in early stages of heart attack or stroke.
 - Monitor activity levels, eating habits and share this information with private companies who advise you on treatments and therapies





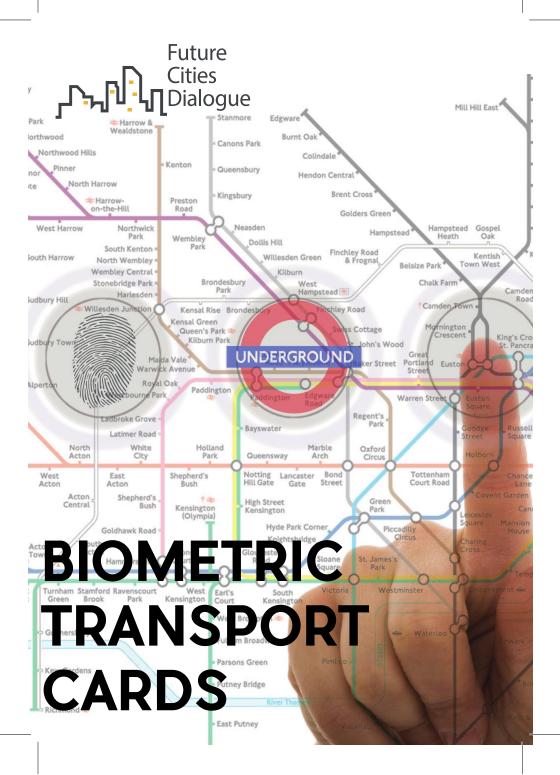
SMALL SCALE NUCLEAR REACTORS

- A small version of a nuclear reactor
- Can be as small as a few meters in diameter.
- This means it's easy to store and transport.
- It's also very efficient: could conceivably power thousands of homes



SYNTHETIC MEAT

- Synthetic 'meat' created in labs is an alternative to real meat
- It involves taking animal muscle cells and applying a protein that promotes tissue growth.
- Can be a cheaper option than real meat



BIOMETRIC TRANSPORT CARDS

- Biometric information and personal profiles are used to track individual journeys and charge you for the journeys you make on public transport or paid-for private transport
- Information is held about you including bank details so that no cash is required to travel
- Can be recorded on a card, use scanning of the eye, face or fingerprint or even a chip which can be implanted under the skin.



PRINTERS

3D PRINTER

- Almost any 3-dimensional object can be made using a 3D printer, a 3D model and raw material.
- 3D printers are used to 'print' all kinds of every day items including:
 - cars
 - body parts e.g. replacement wind pipe or prosthetic limbs
 - even food!