



Uttlesford 2035

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“Technology is the answer, but
what was the question?”

Cedric Price, 1966

The impact of technology on rural planning

The physical impact



- The COVID pandemic has accelerated the switch to remote working
- Rural Enterprise Hubs are one manifestation of this.
- They offer high-spec flexible office space with super-fast broadband connectivity.
- They appeal to both SME's and remote workers
- In the NE pilot demand has outstripped supply.
- They also offer networking opportunities both between the businesses themselves....
- ..but also for external advisors to connect to rural businesses.

How could rural enterprise hubs support and attract small to medium businesses in Uttlesford and enhance sustainable ways of working?

Space to grow

- Manufacturing, digital and creative industries are significant employers and contributors to GVA in rural areas
- Dominated by family businesses with strong ties to the local community
- Very difficult to find suitable premises as they grow.
- Often split over multiple sites as the grow.
- Or else move to larger business parks on urban fringe.
- Often the focus is on small business/trade units.

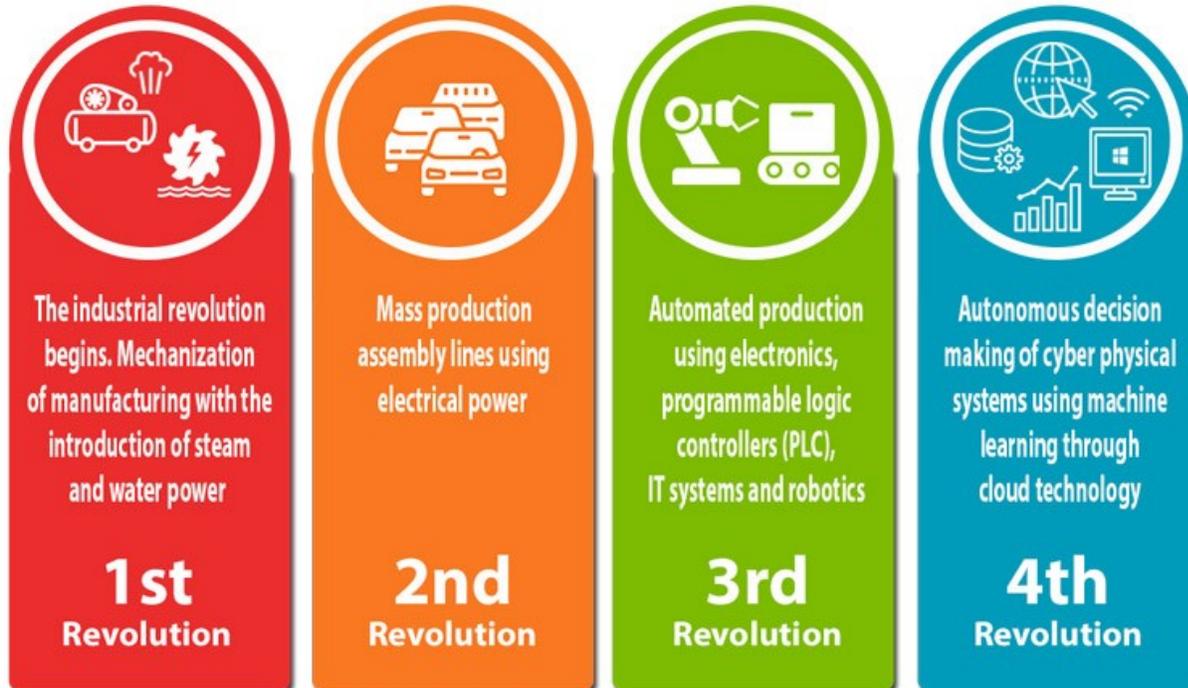
How can the Local Plan support diverse business needs in Uttlesford and enable flexibility to grow?



Next generation technology

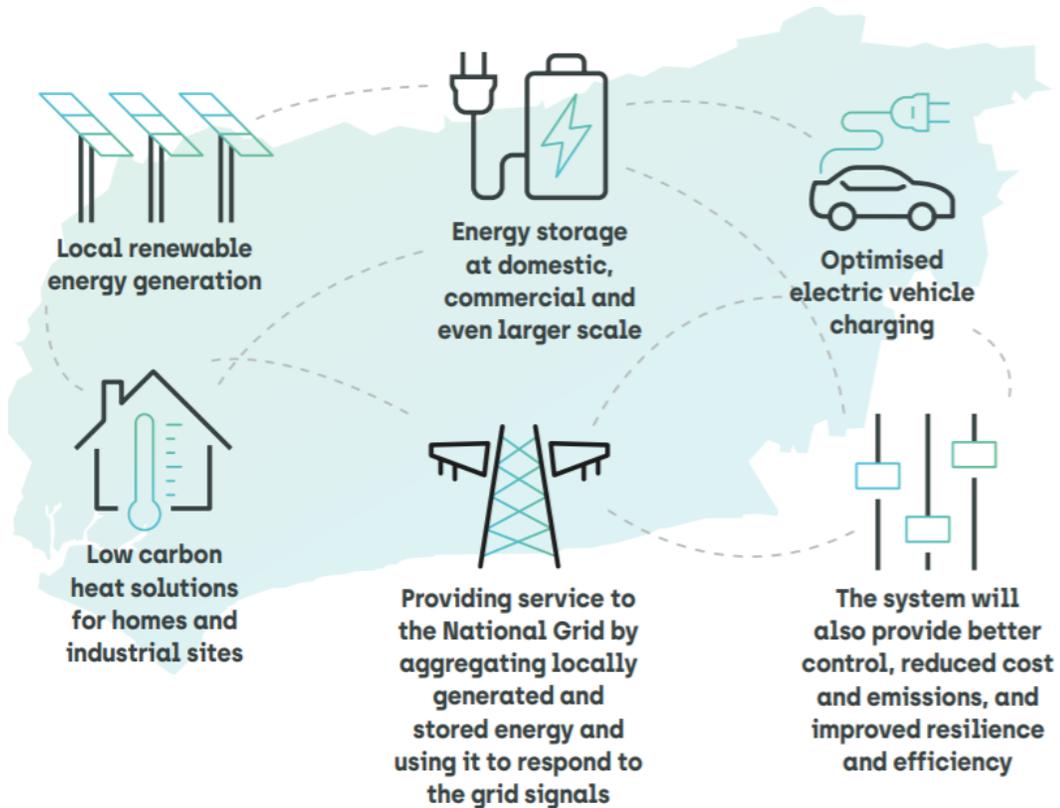
Will rural areas be left behind?

INDUSTRIAL REVOLUTION



- a series of technological developments that are characterised in that they 'leverage the pervasive power of digitization and information technology' (Schwab, 2016: 19)
- Technologies such as Connected & Autonomous Vehicles, Internet of Things, 3D printing, Artificial Intelligence and more.....
- Many smart city technologies have been developed as solutions to the perceived flaws in cities:
 - Policing the city
 - Managing the city
 - Resourcing the city
- The logic is rural areas don't have the same problems.
- Rural areas are often seen as the antidote to technology, the place to get away from the always connected world.

However.....



- Rural areas already have a head start on some of these developments, for example:
 - Distributed, renewable, energy systems
 - Internet of Things and precision farming
- What is interesting is the relationship between technological change and societal change..
- “What is interesting about smart grids is that they turn passive consumers into active managers of a common pool resource” (Wolsink, 2012)
- Planning therefore needs to think about and deliver societal scale solutions.
- Smart grids need digital connectivity which needs big data analytics which needs people to be happy to share data.

How can communities in Uttlesford benefit from renewable energy or smart grids?

How can new technologies be best utilised in our rural context?

Community Smart Building Project

- Rural community buildings are difficult to maintain, particularly financially
- Energy costs are often the biggest financial burden
- Project aims to install renewable energy, battery storage and intelligent building management in 12 buildings
- Aim to minimise the energy costs for communities
- Equipment owned and maintained by a Community Interest company. All profit goes back to community
- Also link the systems together to create a distributed power plant.
- By providing grid balancing services create an income stream for rural communities



Some planning issues

Connected and autonomous vehicles



Connected and autonomous vehicles: the transition period
www.transportxtra.com

Singapore sets standards for autonomous veh...
saemobilus.sae.org

Connecte...
www.arca...

Connected and A...
ricardo.com

5G unified connectivity
 LG and Qualcomm to develop 5G connected ca...
en.letsgodigital.org

CARMA is the USDOT's V2X platform for ...
www.autonomousvehicleinternational.com

- CAVs will be here one day, not tomorrow but soon.
- Has the potential to offer all segments of the population the same level of mobility as someone with a private motor vehicle.
- How will this change recreation, commuting, lifestyle decisions of the young and old for example
- Will peri-urban rural areas become giant CAV car parks?
- How can rural areas ensure they benefit from availability of CAVs

How can Uttlesford plan for CAVs and flexibility to embrace new technologies as they emerge?

Lifetime homes

- We are an aging society, rural areas are aging faster.
- Nearly one in five people currently in the UK will live to see their 100th birthday. This includes 29% of people born in 2011
- How can homes adapt to the changing circumstances of peoples lives
- Encourage multi-generational developments
- The role of technology in living better for longer.

How can we ensure the rural areas of Uttlesford are vibrant, economically and socially sustainable places?



Thank you

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