

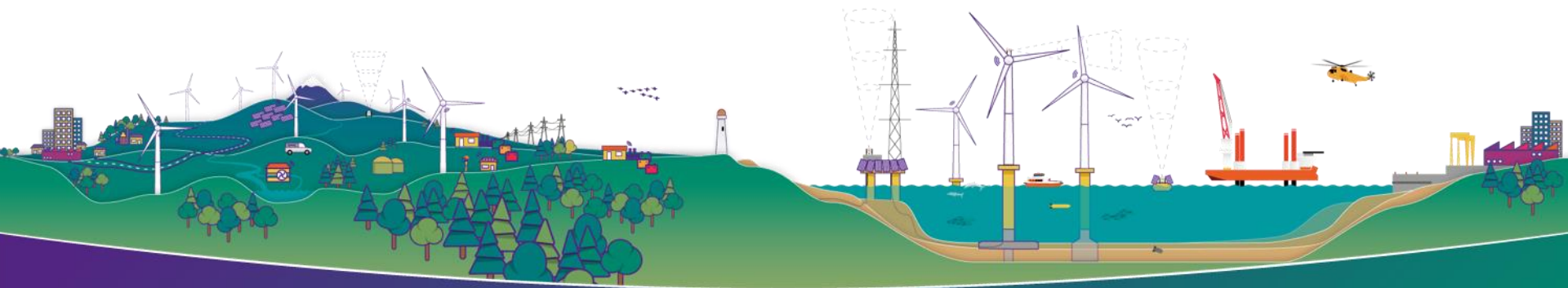
SRIHC 2019

Back to The Future: What does the future hold and how do we plan for it ?

Date: 1st November 2019

Produced By: Jeremy Sainsbury

Produced For: SRIHC Conference



- EU carbon neutral by 2050.
- UK carbon neutral by 2050 (6th Carbon budget 2020).
- Scottish Government new Climate Change targets. (carbon neutral by 2045). New targets published April 2020.
- COP 26 Glasgow 2020.
- **WHAT WILL THIS ADD UP TO ?**
 - » **UK Policy framework agreed.**
 - » **Scotland agrees its role within the UK, as do Wales and Ireland.**
 - » **UK Targets agreed until 2037.**
 - » **Scottish targets agreed to 2045.**
 - » **Local authorities need a plan.**
 - » **Great opportunity for funding and investment.**
 - » **The pressure is on. The clock is ticking.**



How do we manage and agree a local plan ? Things to consider.

- Important structure, everyone must be part of the process.
 - 30 year vision. (pathway for young people and investors).
 - 10 year plan.(infrastructure takes that long).
 - 5 year budgets. (fits the electoral and Gov cycles).

ISSUES

- Scottish Government thinks in Sectors.
- One size does not fit all !
- Regional Plans need to be formulated in a way that Scottish Government can understand. The information they supply must be useful. Co ordination and consultation is key.
- Cross party consensus needed.
- Co operation between private and public sectors.
- Co operation between agencies and local Government.
- New money needed. If private there must be a believable plan.
- Staying still is not an option.
- Speed of change is unprecedented.
- Picking winners will be very difficult.
- Rural Scotland's future relevance and prosperity is the prize.



How do all of us engage with this change ?

The new economy must be based on a team approach to maximise benefits.

1. Start big, a national vision (Scotland is Good at this bit)
2. Understand how each region can help. Cheapest carbon wins.
3. Translate to regional analysis around the best delivery for the region. Where is our competitive advantage?
4. Consult with communities and other Statutory/ Non Statutory bodies. Give them choices.
5. Engage with developer and investors.
6. Co ordinate agencies and authorities to maximise the benefit from every development.
7. Social inclusion is key.
8. Disadvantaged people cannot be left behind.
9. Get the enablers right.
10. Think of what will change in the next 30 years and design to assist this change.
11. Education of young and old. Get ready to be disrupted 😊.
12. Create local plan fitting within a larger regional plan fitting within the national plan.
13. Execute and monitor.



The Background to a vision.

- Where will we be in 2050 and how do we prepare ?
- What will this list mean for future regional planning and how we live ?:-
 - Your house will be smart .
 - You will be more energy efficient.
 - Your car will be electric. Transport will be more co ordinated and clean.
 - Your energy will be local, (home, community , national).
 - Your work will be remote.
 - Computers/ Robots will do many of the things we do today.
 - Services will be automated.
 - Disruptive technology will change our opportunities every 3-5 years.
 - Heating will be clean gas or electric.
 - We will double our electricity consumption but reduce over all energy consumption.
 - Looking back the next 30 years will be viewed as revolutionary.
 - We must equip young and old for the pace of change.
- Vision : Carbon negative rural Scotland with a diversified economy working for young and old equally ?

How do we ensure Success ?

- We cannot predict which of the disruptive technologies will succeed but we do know what they will be doing and can plan for a system that enables change.
- Good Communications must be at the heart of any future rural economy.
 - Access to cheap power. Dynamic liquid markets.
 - Enables smart devices. Peer to peer trading.
 - Enables home batteries , roof PV and car charging while minimising the need for physical infrastructure.
 - Allows access to automated care/monitoring for elderly.
 - Provides for real time grid balancing and smart grid options.
 - Enables home working and future flexible working systems.
 - Education is transformed. Rural is no longer a disadvantage.
 - Transport systems and infrastructure to be co ordinated and efficiency maximized.



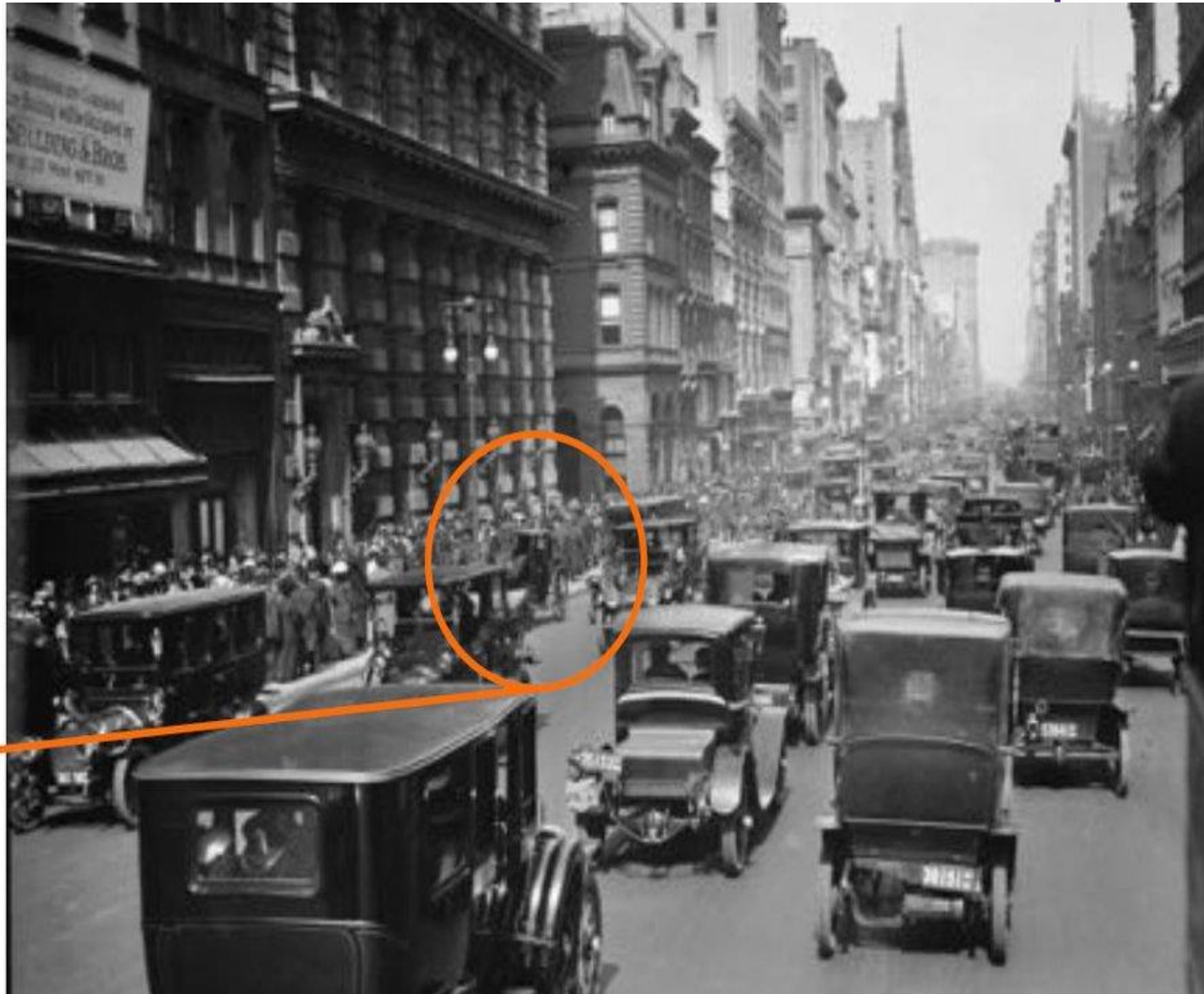
Easter morning 1900: 5th Ave, New York City. Spot the automobile.



Source: US National Archives.

5th AVE NYC
1913

Where is
the
horse?

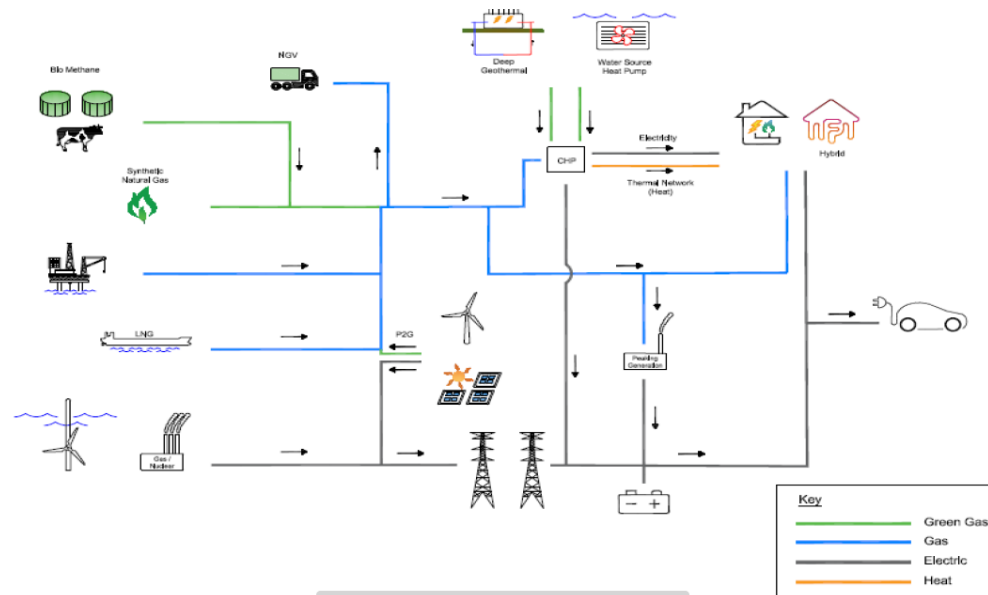
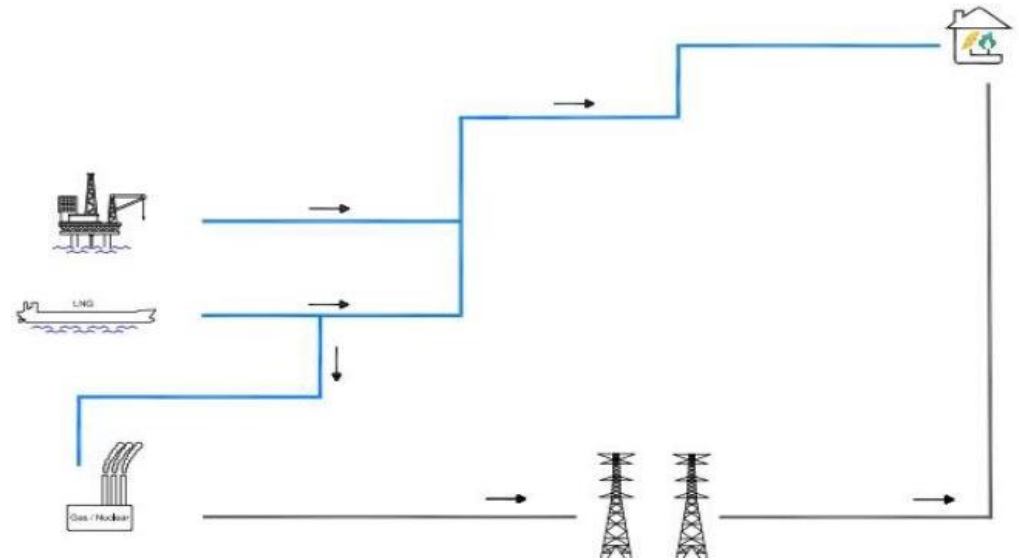




A potential example for electricity

The grid / increased demand:-

- Model predicted demand as people convert to EV's and Heat pumps.
- Work with planners, communities, developers and grid companies to devise the best plan for system upgrades where they are needed.
- Couple with investments that help support the upgrades.
- Create planning policies which enable investment in the required infrastructure.
- This takes 10 years to deliver. WE MUST START NOW !
- The majority of the future energy needs of the rural economy will be met by electricity. If we do not facilitate it, the rural economy will be disadvantaged and uncompetitive.
- If the correct capacity is enabled there will be many areas where rural economies will have a competitive advantage for attracting investment.



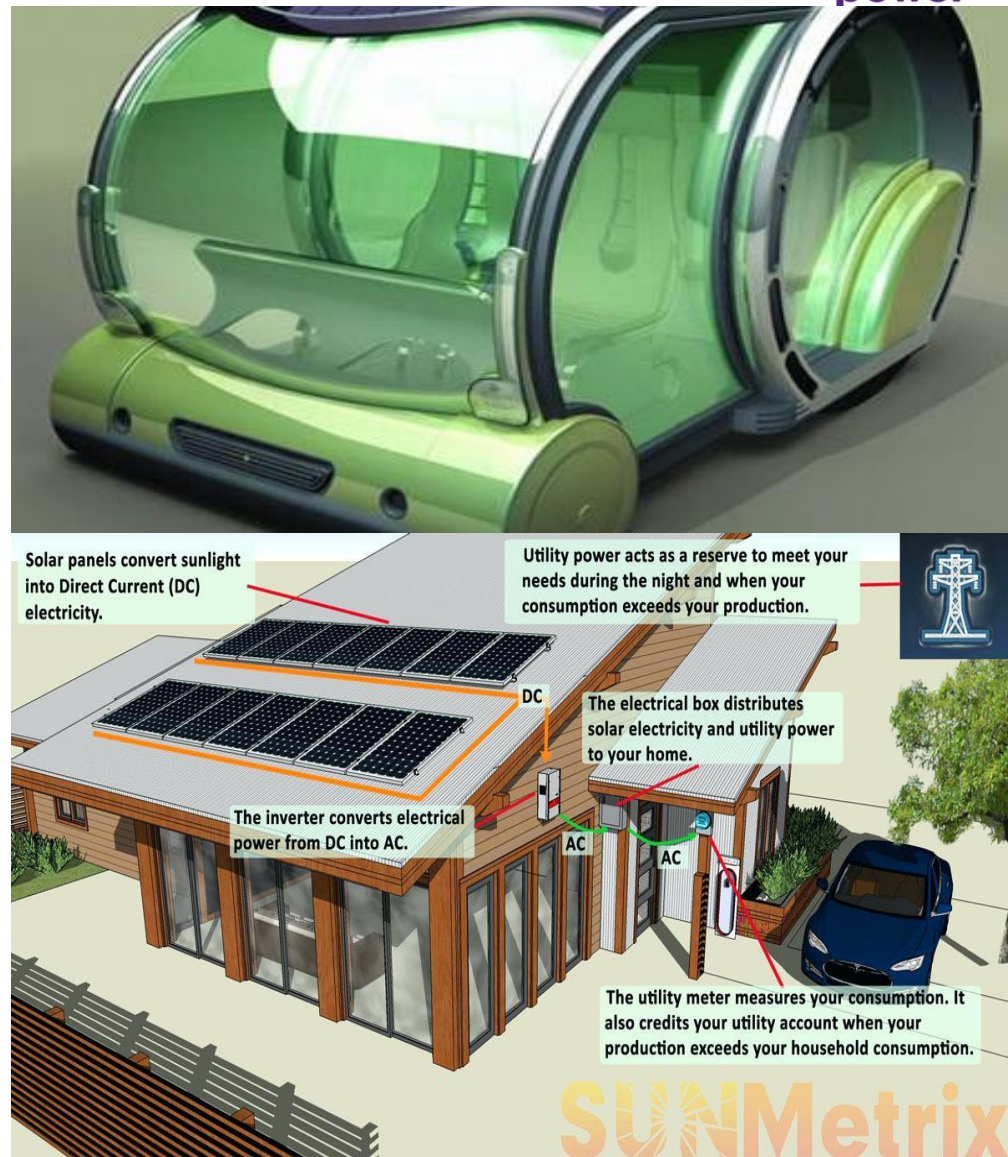
How can planning and infrastructure facilitate change? What do we need ?

→ The enablers

- Good communications are essential.
- Enough grid capacity.
- Enough generation.
- Cheap power.
- Smart meters.
- Energy efficient products.
- Automation, AI and

→ What do we need ?

- Broadband and fibre networks.
- Good electrical networks. T and D.
- Better Housing.
- Flexible regulatory framework.
- Do not plan in silos.
- Policy tools: Carrots and sticks.
- Facilitate good change /platforms.
- Co ordinated road and rail transport and infrastructure.



What is there not to like. Loads of gadgets !

