



The Merton Rule – a practical workshop

www.apse.org.uk

APSE Energy and the REA

Stockton on Tees

25 May 2017



Introduction

Phil Brennan

Head of APSE Energy



Introduction

Dynamic agenda

Use your assets

Use your powers

Have a strategy – energy, investment, asset management, carbon reduction...



Agenda

Ray Noble – REA Associate

Steve Cirell – APSE Associate

Paul Taylor, Principal Environment Officer, Stockton on Tees
Borough Council



Ray Noble – REA Associate

The Merton Rule –

A Practical Workshop

“The Importance of Adoption”

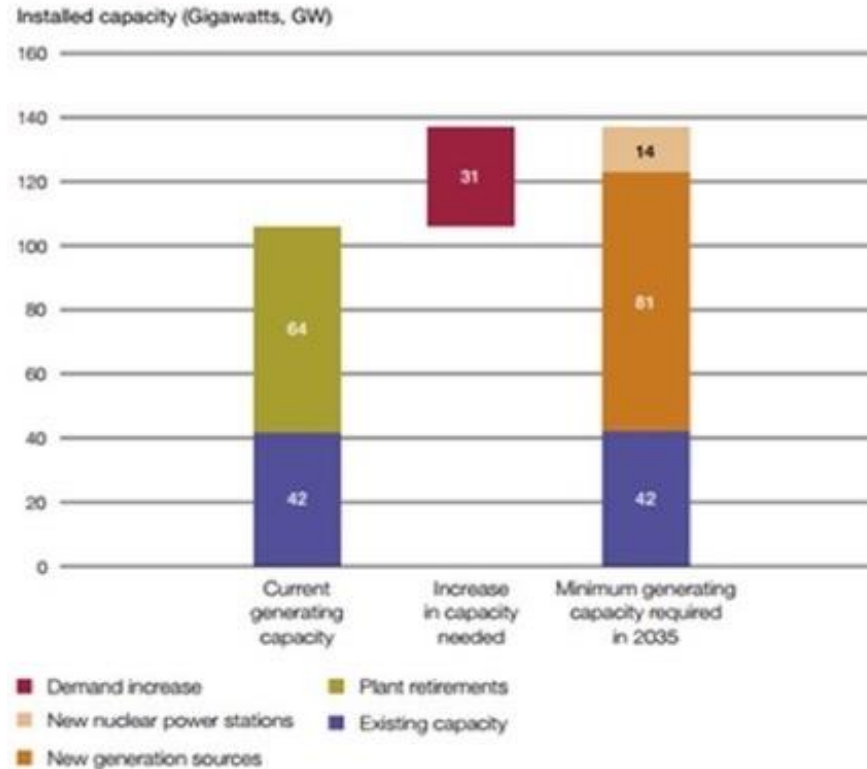
Ray Noble – REA Advisor

Government's Energy issues (1)

- Years of no investment in energy
- Many power stations reaching end of life
- Grid requires upgrading
- Demand for electricity increasing

The UK's energy challenge up to 2035

The Department projects that electricity demand may increase at the same time that a large proportion of existing generating capacity retires



Notes

- 1 The Department projects a range of scenarios for the future of electricity generation. This figure uses the scenario based on its central estimate of economic growth and fossil-fuel prices and shows the generating capacity required to meet the Department's security of electricity supply and decarbonisation objectives.
- 2 The figure shows total installed capacity – the maximum electrical output that power generators can produce unadjusted for plant availability and outages.
- 3 New generation sources includes 17 GW from European electricity interconnectors.

Source: National Audit Office analysis of Department of Energy & Climate Change energy and emissions projections data

Government's Energy issues (2)

- Environmental rules have killed Coal
- Renewables now making a big impact, many being connected at the distribution end of grid
- Nuclear is expensive, few want to invest
- Biomass coming from Canada!
- Gas supply not guaranteed beyond 2035
- Existing Houses will have to change heating system!
- Government need an Energy Strategy



Government and Energy issues (3)

- Money and Support funding is running out
- Market will have to decide – lowest price wins!
- Distributed Generation is happening
- Air Source heat pumps need electricity
- Transport needs electricity (EV's & Rail)
- Cities are struggling with pollution issues
- Storage is a game changer for Solar and Wind



Industrial Strategy

- Security of Supply is vital (particularly with Brexit)
- Must be competitive with other Countries on energy
- Wind (Onshore), Solar and Storage will soon be the cheapest form of energy generation across the World
- Air Source, Ground Source Heat Pumps together with UK grown Biomass and AD all have a major part to play
- **NEED FOR A TRANSITION STRATEGY**
- Will Nuclear ever be built? Can we wait?
- What happens if Energy providers go bankrupt
- Should investment be made in the Grid
- How much can Renewables with Storage provide

Zero Carbon Buildings - Myth?

- Government previously relaxed Zero Carbon Building requirements
- But knowing EU required them by 2019
- So Zero Carbon has not gone away – just got delayed!

- Important that LA's take account of this when formulating policy.
- Costs of achieving Zero Carbon have fallen significantly



Speed of Technology advancements

- Electronics Industry lead development for Phones and Computers developing smaller but more powerful batteries
- Motor Industry now developing the same technology to power Electric Vehicles
- This same technology is now entering the power industry at all levels, including buildings.
- All based around Lithium Ion battery technology



Energy solutions are Pollution solutions

- All car manufacturers are now introducing a full range of EV's from 2017 to 2020 with ranges of 200 to 350miles (range anxiety is dead!)
- Even heavy transport moving to electric and Hydrogen Fuel Cells(Buses, Ships & Lorries)
- Talk of a ban on diesels and a scrappage scheme
- Delivery vans will soon all be electric

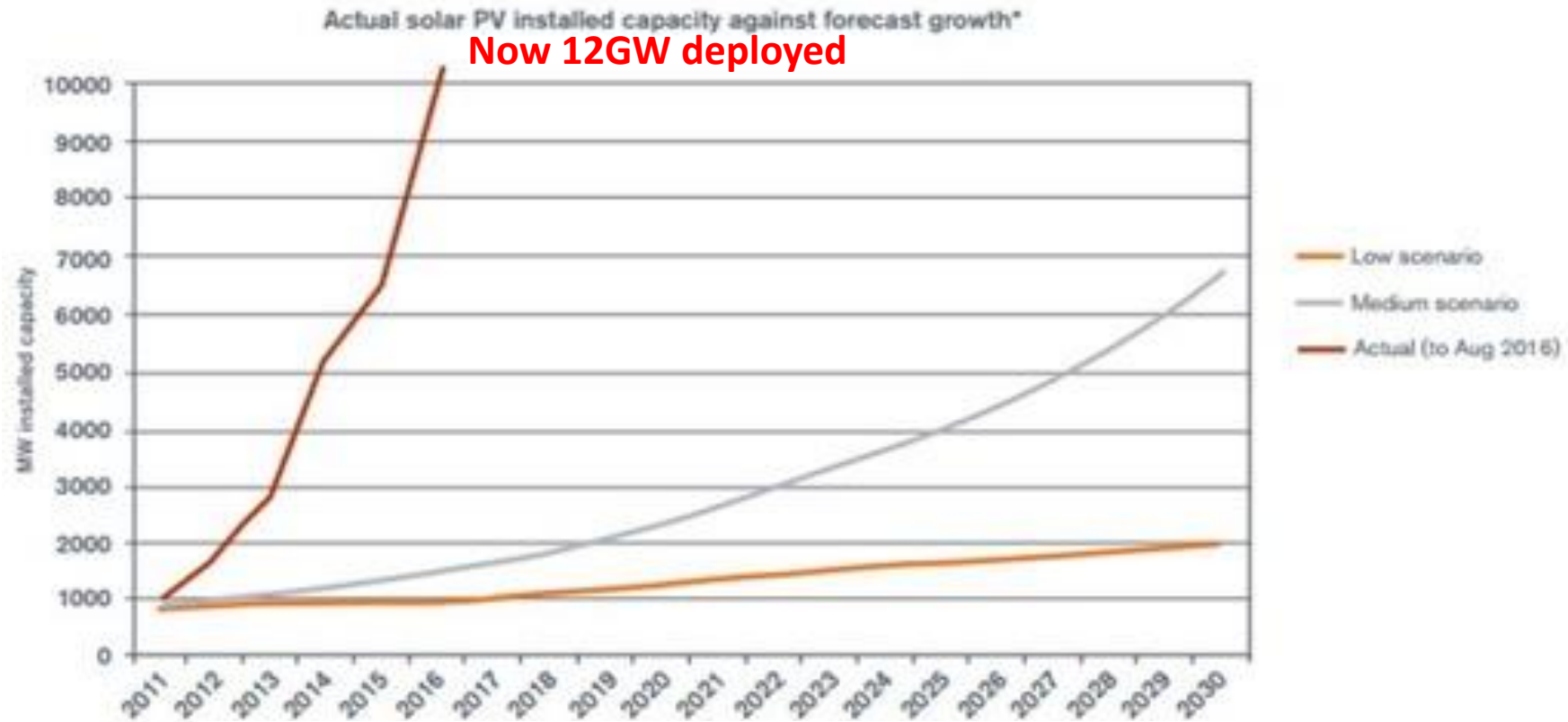


Fossil Fuels on their way out

- Charging EV's at home or locally with long runs topped up on Motorway Service Areas
- Charging times now 30mins heading for 5mins
- EV's need "clean" electricity
- Grid will not cope with fast chargers and need Storage as an interface
- Solar canopies over parking areas with Storage



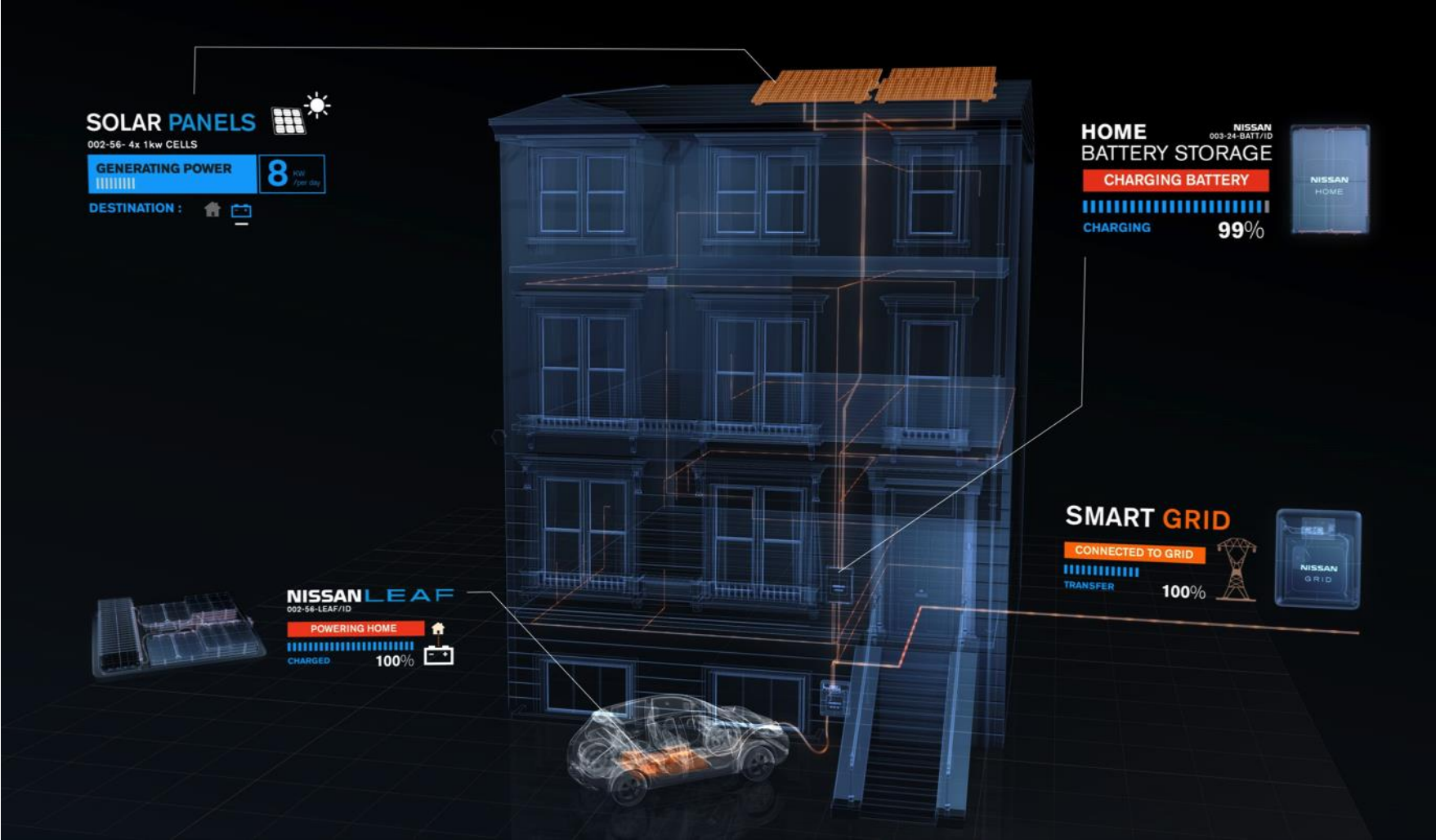
Global mass production drives down cost rapidly



* Low and Medium Scenarios come from the EA Technology 2012 report "Assessing the Impact of Low Carbon Technologies on Great Britain's Power Distribution Networks". Actual installed capacity is from DECC solar photovoltaics deployment data.

Storage will drop in price faster than Solar

Smart Transport and Housing



Reducing energy need and supply

- New Buildings – should apply the Merton rule
- EV charging needs to be included
- Energy efficiency should be “Passive Haus” levels
- LED lighting and “AA” rated white goods need to be specified
- Site generation is a must, technology has the solutions
- Energy companies in problems, 15% increase in price shows what is around the corner!



Time of use Smart meters are coming

- Customers need to be protected from “Red Zone” prices, particularly the “fuel poor”.
- Housing with Solar and Storage can avoid Red Zone prices
- Moving to a total electric economy
- Makes total sense to make buildings / sites a generator
- Costs now affordable
- Energy bills can be reduced by up to 75%



Start working out the opportunities

Cornwall's energy future

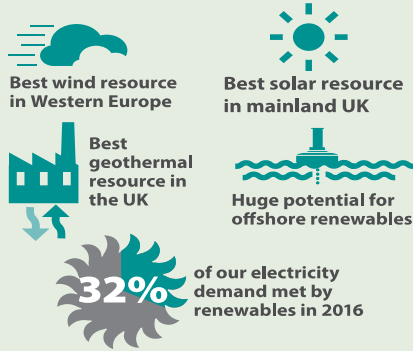
We will create an energy future that is cleaner and more affordable, retaining the social and economic benefits in Cornwall.



CORNWALL & ISLES OF SCILLY
LOCAL ENTERPRISE PARTNERSHIP



Cornwall has a wealth of renewable energy resources



We will exploit this unique opportunity to...

Tackle energy inequalities

Making our homes, businesses and transport greener and more affordable.



Take local control of our energy

Generating, owning and using our energy locally to reduce bills.

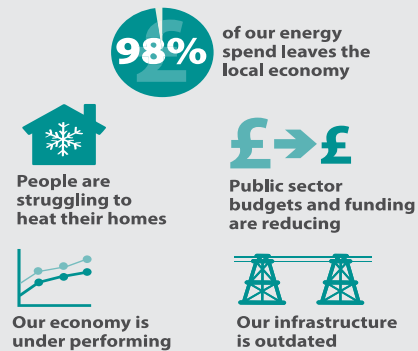


Become a world-leading green economy

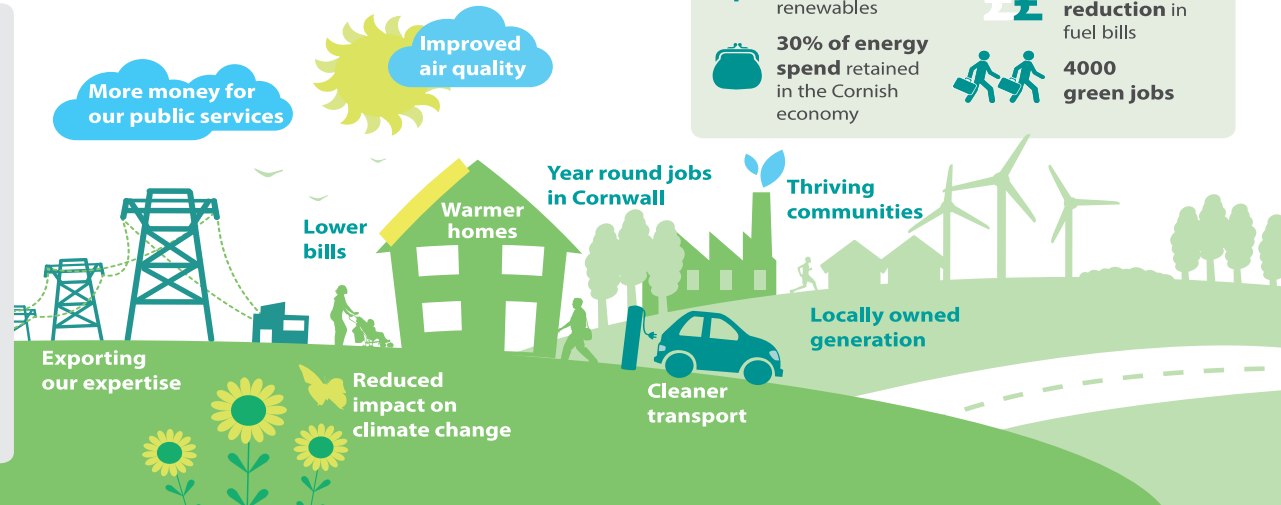
Retaining benefits in our communities and securing year round jobs.



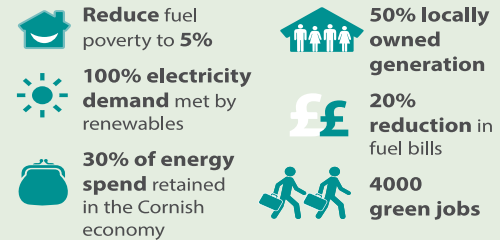
but Cornwall is not benefiting and we currently spend £1bn a year on our energy



We will create an energy future that is cleaner and more affordable, retaining benefits in Cornwall



2030 outcomes



November 2016

The Merton Rule starts the Solution..

Thank You

Ray Noble

rn.solarbipv@gmail.com





Steve Cirell – APSE Associate

The Merton Rule – A Practical Workshop

Stockton on Tees

25 May 2017



Introduction, Development, Legislative Force and Amendment of the Merton Rule

Stephen Cirell
Lead Consultant, APSE Energy





Stephen Cirell Consultancy Ltd

Introduction

- The Merton Rule
- Why now?
- The APSE Energy / REA initiative



Introduction of the Merton Rule

- “The Merton Rule is named after the Council in the [United Kingdom](#) that in 2003 adopted the first prescriptive planning policy that required new *commercial buildings over 1,000 square meters* to generate *at least 10%* of their energy needs using on-site renewable energy equipment. The policy was developed and implemented by policy officers at Merton Council who received corporate and political support. Its impact was such that the Mayor of London and many other Councils also implemented it; and it became part of national planning guidance.”



Purpose, Application and Development

- What its for
- How it is applied
- Development of the rule



Legislative Force

- Started as a voluntary provision
- Then in planning policy
- Then legislative force
- The Planning and Energy Act 2008



National Government Meddling

- A change of Government
- Attacks on the green agenda
- Zero carbon homes & buildings strategy
- The Housing Standards Review
- The proposals for the future



Legislative Changes

- Energy efficiency standards
- The Deregulation Act 2015
- Amends to the Planning & Energy Act 2008
- Renewable energy provisions



Planning Policy

- The National Planning Policy Framework
- DCLG Guidance
- Ministerial Statements



Problems with the Merton Rule

- Different issues
- Hostility from the building industry
- Where it cannot be sorted
- Allowable solutions



The APSE Energy Survey

- 51 respondents:
 - 13 apply the Merton Rule
 - 24 do not apply the Merton Rule
 - 14 don't know



The APSE Energy Survey

- Reasons given:
 - Since the scrapping of the Code for Sustainable Homes we have had great difficulty in applying it
 - It has been met by challenge from developers
 - The legality of applying standards over and above Part L of the Building Regulations?



The APSE Energy Survey

- Reasons given:
 - Building Standards in our Council have indicated that they would be unwilling to enforce requirements beyond current regulations
 - For domestic projects, we did have a 10% on site target but it was removed in line with the Housing Standards Review (NB NOT CORRECT)



The APSE Energy Survey

- Reasons given:
 - I have not heard of the Merton Rule
 - Discouraged by the planning policy framework



Good Practice

- Why would a LA want to do this?
- Carbon benefits
- Fuel poverty
- Consequences of problems



Encouragement to use the Merton Rule

- Awareness
- Evidence base
- The current housing crisis



Summary

- The two facets
- The position on each
- What changes are in force and what are not



Conclusions

- What will you do?



Introduction, Development, Legislative Force and Amendment of the Merton Rule

Stephen Cirell
Lead Consultant, APSE Energy





Experience from Stockton

Paul Taylor,
Principal Environment Officer,
Stockton on Tees Borough Council



Stockton-on-Tees – APSE Merton Rule seminar

25 May 2017

Paul Taylor – Principal Environment Officer



Stockton-on-Tees
BOROUGH COUNCIL

Environment and Housing

Big plans for our places and open spaces

Environment Policy

- Environment and sustainability
- Low carbon and adaptation
- Fuel poverty and affordable warmth
- Developing policy and support Local Plan
- SA and SEA
- All major planning applications reviewed

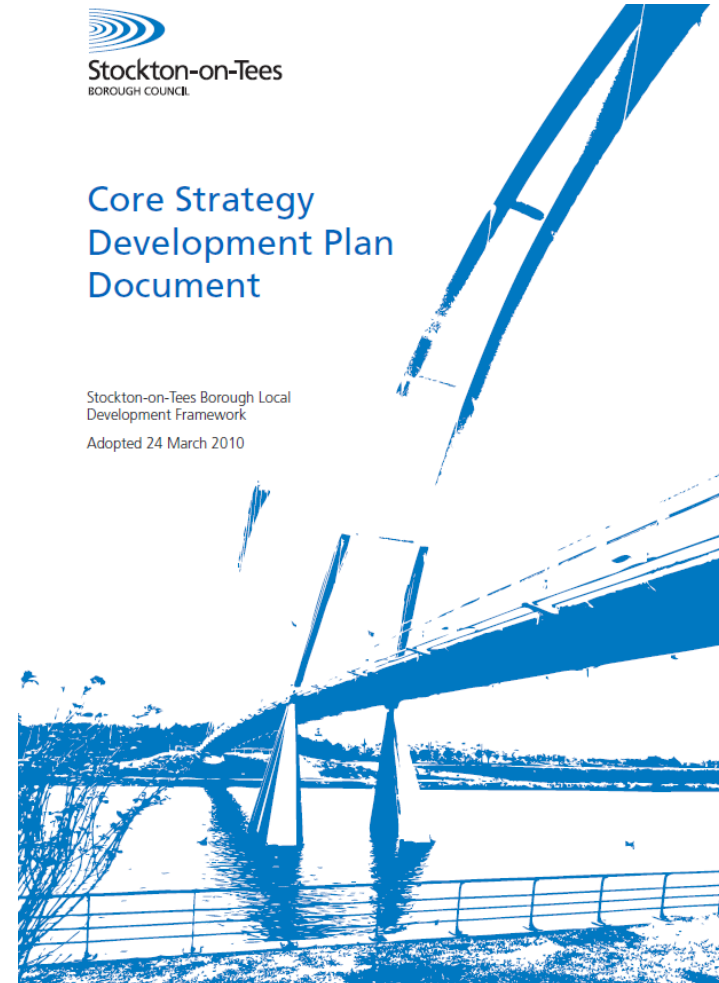


Current Local Plan status

- 1997: Last 'Local Plan' adopted
- 2010: Core Strategy Development Plan document adopted
- 2012: Along came NPPF
- 2012: Regeneration and Environment Local Plan (RELP) went as far as consultation draft

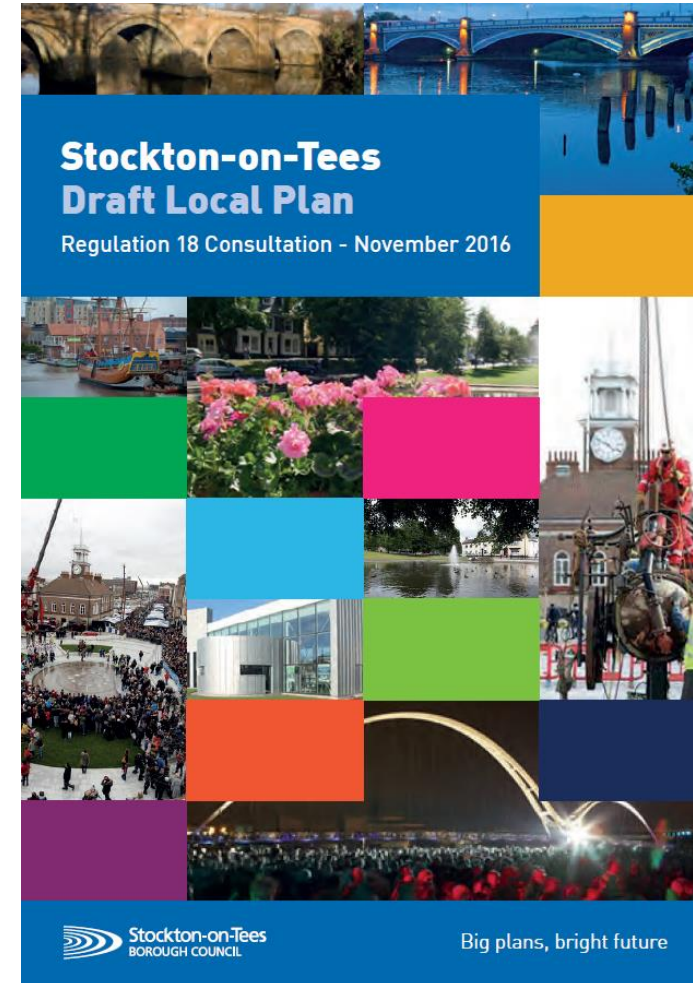
2015: Housing standards review

- 2016: Emerging Local Plan 2017 – 2032 through consultation
- 2018: Aiming for examination in Spring



Our approach to Merton

- Current policy CS3 Sustainable Living and Climate Change
 - *Code for Sustainable Homes, level 4*
 - *10% predicted energy requirements from onsite renewable energy*
 - *Energy efficient measures in all build*
 - *All domestic development to Lifetime Homes Standards*
 - *Zero Carbon Homes by 2016*
- Very effective up to 2015



Housing Standards Review

- Utter confusion at the time
- Challenge from day 1 from developers on live applications
- In some instances applications withdrawn and resubmitted next day
- One national planning consultant signed off with “Local Planning Authorities should no longer be conditioning sustainability criteria in planning approvals”
- Legal opinion sought



Stick to our guns – last 18 months

- Advice was to continue to condition renewables – but caution if that was taking development higher than Code 4
- Continued to apply the existing policy on 10% renewable energy for energy demand
- Response was effectively ‘can we do energy efficiency’?!
- We’ve just about continued to achieve betterment, 5 year supply didn’t help!

In Roof Silver Frame Polycrystalline Panels



Current position

- All about the relationship with the developer
- Viability is always questioned but we meet with 'what can you do'
- Always an opportunity to gain betterment

- Experience has influenced the development of the new policy
- Emerging Local Plan Policy retains 'Merton Rule' (initially 5 or more dwellings) →
- Is it viable? So many variables...
 - we are getting 10% now
 - Housing allocations
 - Combined Authority & Tees Valley Mayor

All developments of ten dwellings or more, or of 1000m² and above of gross floor space, will be required to:

- submit an energy statement identifying the predicted energy consumption and associated CO₂ emissions of the development and demonstrating how the energy hierarchy has been applied to make the fullest contribution to greenhouse gas emissions reduction**
- provide at least 10% of the total predicted energy requirements of the development from renewable energy sources, either on site or in the locality of the development.**

Thank you

Paul Taylor

Principal Environment Officer

paul.taylor@stockton.gov.uk

01642 - 526596





Summary

- Merton Rule pamphlet – APS Energy and the REA
- Let us know about progress
- Other events