

Sustainability *first*

**New Energy and Water Public Interest Network - New-Pin
Workshop 5**

**How far will market-led approaches deliver the desired long-term
public interest outcomes for energy and water?**

Revised slide set from workshop on 22nd February 2017

Responsibility for the content of this slide deck sits with Sustainability First

Contents

- 1 Market-led approaches: New-Pin objectives, methodology and approach to this topic
 - 2 Setting the scene: Framing the discussion and current arrangements in energy and water
 - 3 Theory and practice: What can and can't market approaches deliver for the long-term public interest?
 - 4 Spider diagrams: New-Pin exercise to assess how far market-led approaches can deliver the long-term public interest outcomes in specific parts of the value chain
 - 5 Different perspectives on key long-term public interest outcomes & market-led approaches:
 - A water company perspective, Alex Plant, Anglian Water
 - A public interest perspective, Angela Francis, Green Alliance
 - A regulatory perspective, Martin Crouch, Ofgem
 - An academic perspective, Catherine Waddams, UEA
 - 6 Deep dives by break out groups: What can market-led approaches deliver for the long-term public interest in terms of
 - Fairness – what can smart retail markets deliver?
 - Clean / sustainable – what can new commercial services deliver?
 - Resilience / VFM - what can market-led approaches to strategic infrastructure deliver?
 - 7 Conclusions
 - 8 Next steps for New-Pin and Sustainability First
- Annex 1 About Sustainability First and New-Pin
- Annex 2 How to read spider diagrams
- Annex 3 Break-out group deep dives

1. New-Pin objectives for this topic

- This is a complex and topical area. Our aim in this slide set is to work in a structured way towards some headline conclusions & next steps on market approaches to public interest outcomes
- Although our primary focus in this slide set is markets, we have also identified some interventions that may be needed to deliver the long-term public interest outcomes. We will return to these in the forthcoming New-Pin workshop on Regulation and Innovation on 15th November
- This slide set on markets is only a start. It represents a ‘toe in the water.’ Sustainability First will pick up these themes & issues as we develop a new project beyond New-Pin
- There are different perspectives. We wanted to stimulate a frank Chatham House discussion
- We also aim for practical outcomes. We hope that members can use the slides to
 - Learn the cross sector lessons for the long-term public interest of where market approaches may / may not be helpful
 - See some practical examples of where market approaches are currently being developed in the sectors (slides 61, 66 and 71)
 - View the issues and themes arising from markets through different ‘lenses’
 - Gain a better understanding of what companies, regulators and policy makers can do to further long-term public interest outcomes through market-led approaches

1. New-Pin methodology and approach to this topic

- For this topic we have produced a long slide set and info-graphic
- New-Pin works through a process of deliberative engagement; we aim to be as inclusive as possible, building on each others experience to develop new insights
- At the end of 2016 we circulated a Scoping Paper outlining our proposed approach to this topic to Network members for comment
- Taking this feedback on board, we then interviewed 14 people in the Network and beyond in advance of the workshop on 22nd February to help us prepare the initial slide deck. The initial slide pack was used as the basis for discussions at the workshop
- The slides have been revised to take on board comments made at the workshop and the comments made by Network members, and others, since
- The workshop on 22nd February was attended by 37 people, including representatives from public interest groups, energy & water companies, regulators, representatives from Government and academics
- We'd like to thank all those that we interviewed, the discussants at the workshop, participants on the day and those that have sent in comments
- **4 Annex 1** contains further details about Sustainability First and the New-Pin Network

2. Setting the scene: Overview

In this section we explore

- The evolving landscape for market-led approaches in energy and water
- Sustainability First's dashboard for desired long-term public interest outcomes
- Discussion and comments on the desired long-term public interest outcomes and the need for clear, and agreed, definitions
- An overview of the different tools in the box for delivering the public interest
- The **significant** differences in terms of the underlying costs & current arrangements in the two sectors
- The continuing role of regulation in both the energy and water sectors
- The successes and short-comings of **current** arrangements in each sector against long-term public interest outcomes

2. A rapidly evolving landscape for market-led approaches (i)

Rapid change. What were seen as ‘controversial’ ideas about markets are now openly debated – both new opportunities and possible short-comings

Technological

- Digital revolution is impacting both sectors, leading to new opportunities in terms of devices, measurements, data and techniques. Technology is enabling markets to influence activities that they were previously unable to touch

Environmental

- Energy sector is going through significant transition as it adapts to low carbon & climate change
- Pace of change in water is less acute but resilience agenda is leading to calls for market-led solutions / stimulating new ways of thinking
- Push for accelerated house building – but a reluctance to require water / energy efficiency measures as this may put builders off

2. A rapidly evolving landscape for market-led approaches (ii)

Political

- **Brexit**
 - People feeling left behind / out of control – particularly in some regions
 - Likely changes in the agricultural subsidy regime that may open up new opportunities for land management around floods, pesticides etc
- **New Government**
 - Concern for the Just About Managing and need for ‘shared society.’
 - The Autumn Statement promised Green Paper on markets that don’t work **fairly** for consumers (including energy retail) but as at 13 March, no mention of household water competition

Policy

- **The Industrial Strategy (23/1/17)** - Need for targeted interventions. Need to address the imbalance and productivity gap between places
- **National Infrastructure Commission (NIC)** - Developing the National Infrastructure Assessment
- **25 year Environment Plan** – forthcoming

2. A rapidly evolving landscape for market-led approaches (iii)

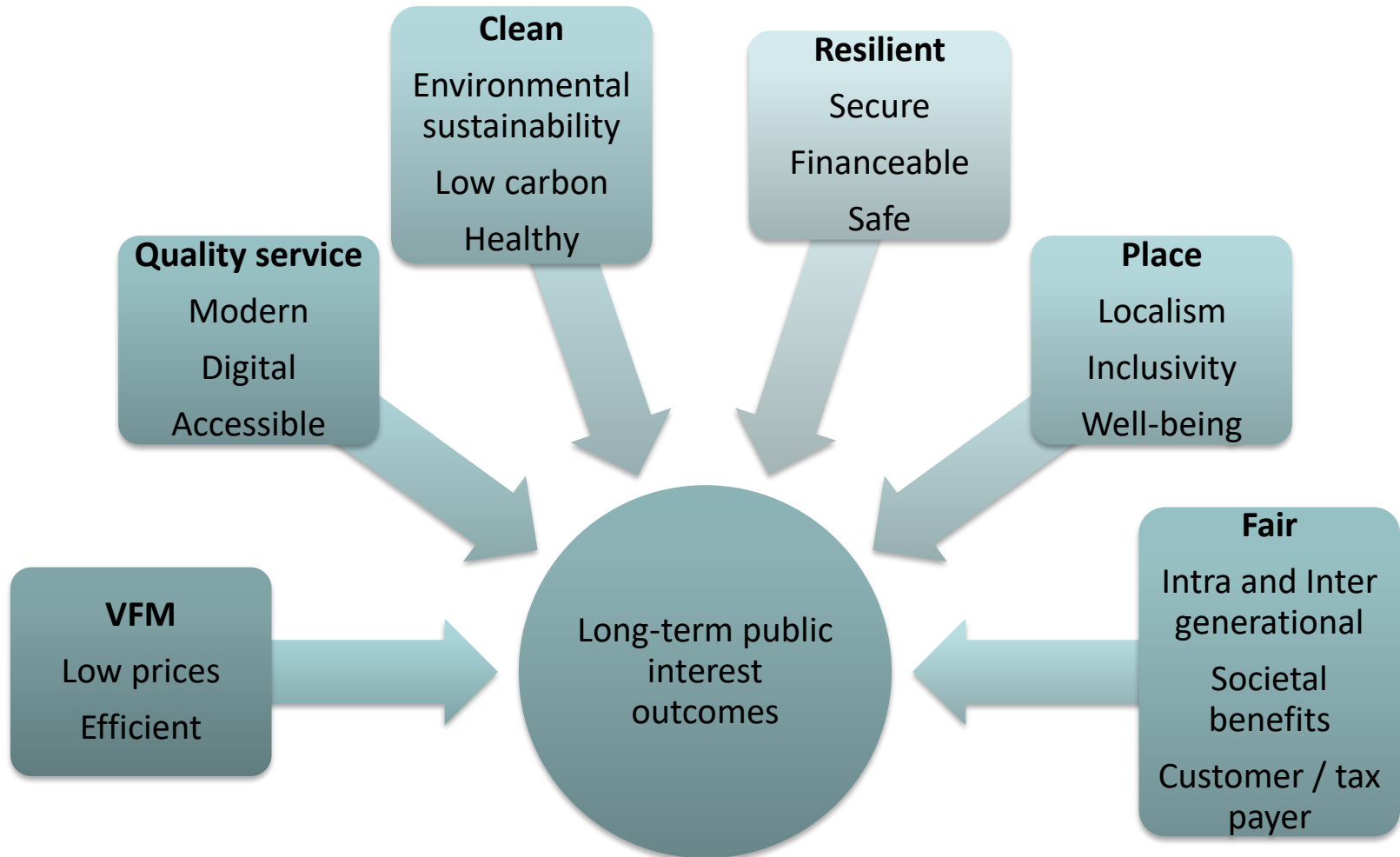
Competition and Markets Authority (CMA) Energy Market Investigation (24/6/16)

- ‘Last chance saloon’ or ‘missed opportunity?’
- On-going debate as to whether sticky / loyal customers on Standard Variable Tariffs should also be protected by price caps – or if price caps should be limited to those on pre-payment meters
- Chair of CMA inquiry has subsequently raised question of whether household energy retail market is suitable for competition (2/9/16)
- Remedies around regulatory accounts will increase transparency of profit levels – prices are going up!

Regulatory

- **Markets vision** - Will regulation ‘wither away’ as markets develop? Unlikely
- **Ofgem Regulatory Stances paper** (11/16) – explaining regulatory approach
- **Ofgem Future of Retail Regulation Project** – Principles Based Regulation
- **Ofgem Innovation Link** (12/16) – to help innovators navigate regulatory system
- **Ofwat Water 2020 Programme** - moving quickly
- **Ofwat Non-Household competition** – market set for opening in 4/17

2. Framing the discussion: Sustainability First's dashboard for desired long-term public interest outcomes (i)



2. Framing the discussion: Sustainability First's dashboard Workshop discussion and comments (ii)

- The long-term public interest outcomes on the previous slide had been 'tested' with interviewees before the workshop
- It was agreed that the long-term public interest is probably best served by the aggregation of these different outcomes (aggregate social welfare)
- There are clearly interdependencies and trade-offs between the different outcomes; they do not always pull in the same direction
- Decision makers need to take an integrated view of the outcomes they want to achieve
- There can be a tension between achieving the outcomes in the short and long-term. It is therefore important to review delivery against the outcomes over time
- The outcomes on the right hand side of the diagram tend to be characterised by the social and environmental externalities in the sectors
- Some Network members thought that 'clean' implied 'no deterioration' or 'avoiding environmental externalities'
- The outcomes that caused the most debate were
 - Place – e.g. equality between places, localism, community, positive discrimination so that there are sustainable and prosperous places countrywide
 - Fair - e.g. equality of opportunities, process or outcomes

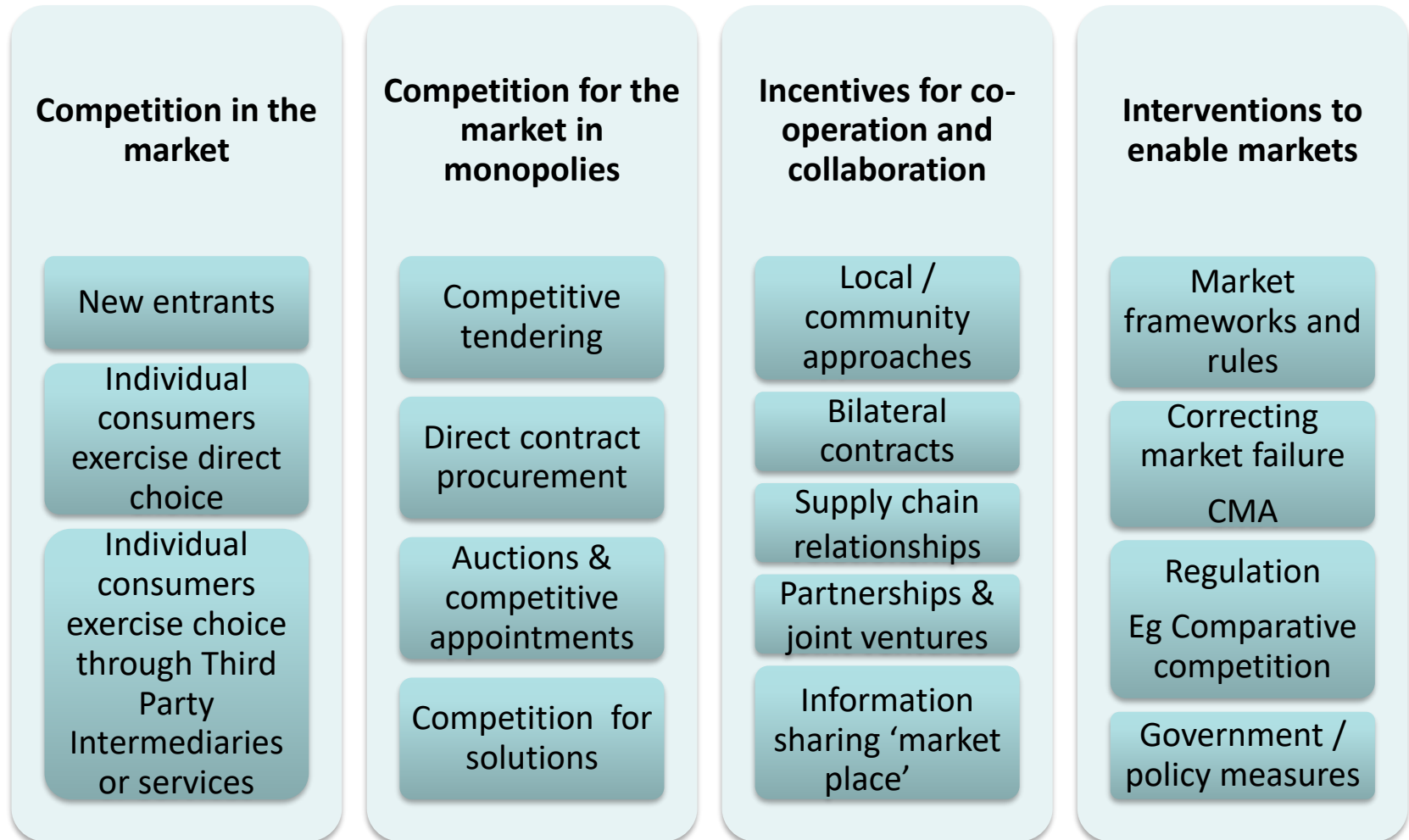
2. Framing the discussion - Sustainability First's dashboard Workshop discussion and comments (iii)

- There was much discussion around possible 'health' outcomes. Some thought these were part of 'clean' - others that they cut across various outcomes, including place.
- Health was seen as a growing issue in energy. Some thought that electricity is now an 'essential service' (heat networks, quality digital services to enable communication and healthy living etc)
- Health was also thought to be an important outcome for water (as well as the need for clean drinking water, there are also the impacts of dirty flood water to be considered)
- The definition of what outcomes may be included as being in the long-term public interest seems to be getting wider; the expectations put on companies are correspondingly increasing
- This has major implications in terms of what energy and water companies – and Government – are each expected to deliver and how these outcomes are paid for (via regressive bills or potentially progressive taxes)
- Given the distributional impacts of decisions in this area, it is important that long-term public interest outcomes are clearly defined and that there is agreement as to how they are best measured
- We will return to this at the end of the project

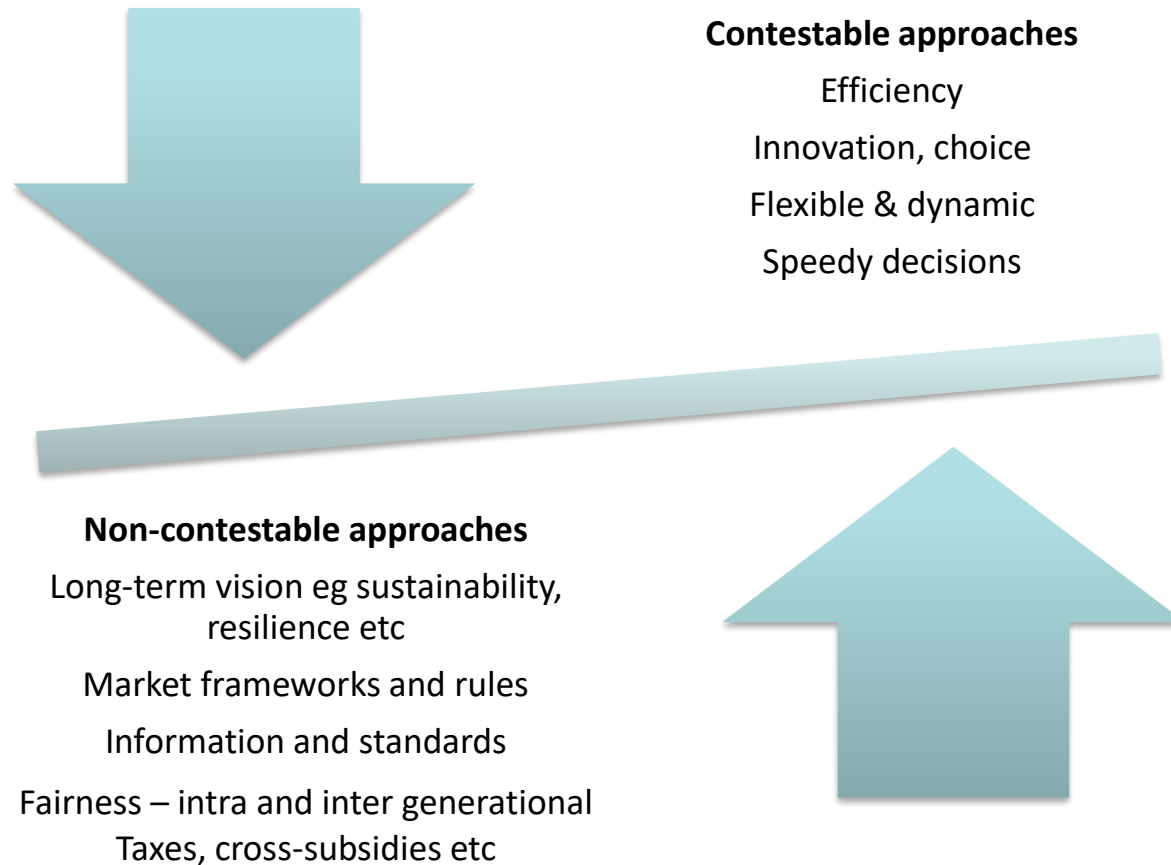
2. 'The tools in the box' – Different means of delivering the long-term public interest outcomes

- There are clearly a range of tools for delivering the long-term public interest
- These fall into two broad, but **NOT** necessarily mutually exclusive, categories
 - Contestable – competition both 'in' and 'for' the market
 - Non-contestable – co-operation / collaboration and interventions
- A mixture of different tools is needed
- The choice is **NOT** between either contestable / or non-contestable tools but the different mix of tools chosen
- This is because all **markets need frameworks, rules and enforcement mechanisms**
- The different tools are explored further on the **next slide**

2. 'The tools in the box' – A mixture of different tools is needed



2. Getting the most appropriate mix of contestable and non-contestable approaches for the long-term public interest outcomes



The choice between contestable & non-contestable approaches isn't black or white or binary
A case by case approach is needed that strikes the right balance in a given set of circumstances

2. 'The tools in the box:' Workshop discussion and comments

- There are clearly tensions between some of the different tools; particularly competition and co-operation. This is important when considering the best way to tackle systemic risks that may need a 'joined up' approach
- There was a lot of discussion of the fact that markets need rules to work and that they can lead to more – not fewer – rules
- There was some agreement that there is a 'grey area' between contestable and non-contestable tools where markets can be managed to deliver the long-term public interest outcomes
- A need was identified to ask what the right 'mix' of tools is at the local and national levels – it may not necessarily be the same
- It was thought important not to take a too macro view of what works
- Some also thought a different mixture of tools from slide 13 may need to be used for delivering the public interest outcomes in terms of resources and in terms of infrastructure

2. Current arrangements in energy – A reminder of where the costs fall and the current tools to manage them (both contestable and non-contestable)

Energy				
Costs	Wholesale (~ 43%)	Networks (~ 24%)	Retail* (~ 16%)	Levies (7-13%)
Current tools	<ul style="list-style-type: none"> • ‘Managed’ trading arrangements; in a framework to ensure system balancing 	<ul style="list-style-type: none"> • Regulation • Comparative competition • Rivalry (fast tracking) • Systems Operator regulatory incentive framework • Competition for the market (eg connections) 	Competition in the market	Policy

Note

This is a high level generalisation for illustration only. There are some differences between gas and electricity here (eg levies are around 7% in gas and 13% in electricity)

* Much of the discussion about markets in *both* sectors is focused here; even though retail costs only make up a relatively low percentage of total costs

2. Current arrangements in water and sewerage – A reminder of where the costs fall and the current tools to manage them (both contestable and non-contestable)

Water & sewerage	
Costs	Upstream, wholesale, treatment, networks (totaling ~ 90%, of which sludge is ~ 5%) & retail* (~10%, of which bad debt is ~44%)
Current tools	<ul style="list-style-type: none">• Regulation, with discrete price caps• Comparative competition & rivalry (Enhanced Business Plans)• Competition for the market• Competition in the market (retail for non-households in Scotland)• Policy ban on disconnections

Note

This is a high level generalisation for illustration only. There are some differences between water and sewerage here

* Much of the discussion about markets in *both* sectors is focused here; even though retail costs only make up a relatively low percentage of total costs

2. Fundamental and continuing role for regulation

- Although there is an increasing focus on markets and contestability, from slides 16 and 17 it can be seen that **regulation** continues to play a key role, particularly given the strong monopolistic characteristics in both sectors
 - **Directly** – in terms of price controls for tackling the significant asset costs in electricity transmission and distribution networks and water and sewerage systems. The price controls and approaches to incentives and charges used by Ofgem, Ofwat and WICS are all evolving
 - **Indirectly** – in terms of creating the market rules, frameworks and enforcement mechanisms for competition in and for the markets. In energy, Principles Based Regulation is starting to be applied to the retail market. It is unclear whether or how far it will be applied in energy monopoly markets

2. Fundamental and continuing role for regulation: Workshop discussion and comments

- There was agreement that we are at a different ‘moment’ in terms of market approaches delivering the long-term public interest outcomes in energy and water
 - In energy there is wide agreement on the need for a low carbon transition
 - In water, there is a less obvious ‘rallying call for change.’ However, concerns around resilience are stimulating the need for new approaches
- It was agreed that regulators will continue to have a major role to play in both sectors
- It takes two to tango; markets need frameworks from policy makers and for regulators to work effectively
- Regulation needs to be principles & outcome focused, rather than process-led, to best support markets and avoid being overly prescriptive
- Regulators have a key role to play in terms of pricing in externalities
- Regulators can also be influenced by both competition and co-operation
 - Between regulators within a sector (eg in water there are economic, environment and quality regulators) and between sectors (eg between Ofgem and Ofwat and through groups like the UKRN)
- ¹⁹ New-Pin will return to this issue in its November ‘Regulation & Innovation’ workshop

2. Crudely, what upsides and downsides can be attributed to the current arrangements in energy in terms of achieving the long-term public interest outcomes?

Wholesale	<ul style="list-style-type: none"> • British Electricity Trading and Transmission Arrangements • Green House Gas emissions ↓ 50% since '90 • CMA – no liquidity issues but limited competition in contract auctions for low carbon electricity
Networks	<ul style="list-style-type: none"> • ↓ costs, demergers released some value (but metering?) • ↑ service, resilience & innovation • ↑ infrastructure investment and interconnection • CMA – code governance needs overhaul
Retail - Household	<ul style="list-style-type: none"> • Bills ↑ from 2004 on. Fuel poverty / concerns re vulnerability • Approximately 70% consumers disengaged • Poor quality of service • Slow switching & barriers for innovators • Non Traditional Business Models ~ 50 new entrants • Energy efficiency potential not maximised or mainstreamed • CMA - unilateral market power (~ £2bn consumer harm /losses)
Retail – Non-Household	<ul style="list-style-type: none"> • ↑ service, innovation, Demand Side Response • Emergence of brokers and aggregators

2. Crudely, what upsides and downsides can be attributed to the current arrangements in water and sewerage in terms of achieving the long-term public interest outcomes?

Upstream & treatment	<ul style="list-style-type: none"> • VFM - abstraction arrangements do not give a 'value / price' to water as a commodity • ↑ sustainability (under Water Framework Directive etc) • ↑ in water quality
Networks	<ul style="list-style-type: none"> • ↑ infrastructure investment • ↓ leakage • ↑ connectivity within company networks and some links between companies but no national water grid (due to topography etc)
Retail – Household	<ul style="list-style-type: none"> • Bills stable since 1995 • VFM – customers not always adequately benefited from gains due to external factors (NAO, 10/15) • ↑ service quality and generally high customer satisfaction • Social tariffs, concerns re vulnerability • High levels of bad debt – spread across all customers
Retail – Non Household	<ul style="list-style-type: none"> • In Scotland - Innovation and water saving / efficiency services for larger users and Demand Side Response tariffs

3. Theory and practice: What can and won't / can't market approaches deliver for the public interest? Overview

For energy and water, in this section we explore:

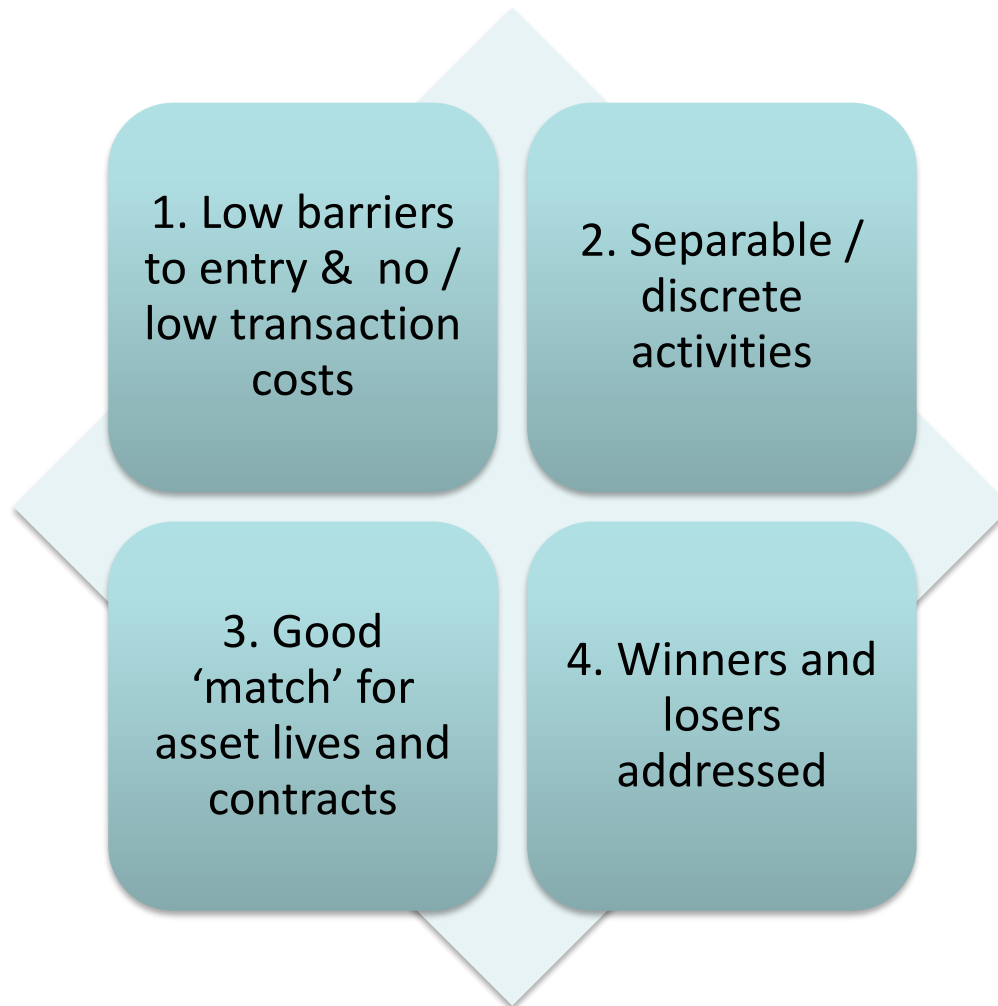
- A reminder of some of the key theories about markets
 - The 'looked for' outcomes and characteristics of market approaches
 - The main pre-conditions / tests for effective market approaches
 - The dynamic direct and indirect impacts of market approaches
- A summary of the workshop discussion and comments on how market theory may apply in practice in the energy and water sectors
- Issues around the implementation of market approaches for Government, policy makers, regulators and companies
- Managing risks around the implementation of market approaches
- Consumer behaviour in the energy and water sectors and the impact this may have on market approaches
- What market approaches can deliver for each part of the value chain, and across the value chain in each sector
- An assessment of areas where market approaches alone won't / can't deliver public interest outcomes and additional intervention may be

22 necessary

3. A reminder of the looked for outcomes and characteristics of market approaches in energy and water

Outcomes	Characteristics
Information and efficiency	<ul style="list-style-type: none"> • Price discovery should improve understanding of assets / asset health and identify high costs / inefficiency / sources of consumer concern & reveal opportunities (allocative efficiency) • Productive efficiency and reduced prices
Innovation	<ul style="list-style-type: none"> • In ideas, partnerships, technologies, business models, approaches • Can be incremental or disruptive • Disruption can change the boundaries between existing activities / different parts of the value chain
Skills	<ul style="list-style-type: none"> • Commercial, consumer facing & stakeholder management skills
Choice	<ul style="list-style-type: none"> • Allocative efficiency • For end consumer but also in terms of approaches and optionality throughout the value chain
Flexibility and dynamism	<ul style="list-style-type: none"> • Responsiveness to customers and opportunities • Optionality can increase dynamism
Speed of decision making	<ul style="list-style-type: none"> • Financial bottom line / profit seeking makes decisions clearer • Market actors will compete to be the first to capture benefits • Reduced bottle-necks
Scalability	<ul style="list-style-type: none"> • The ability for market solutions to be replicated

3. A reminder of the main pre-conditions / tests for effective market approaches (i)



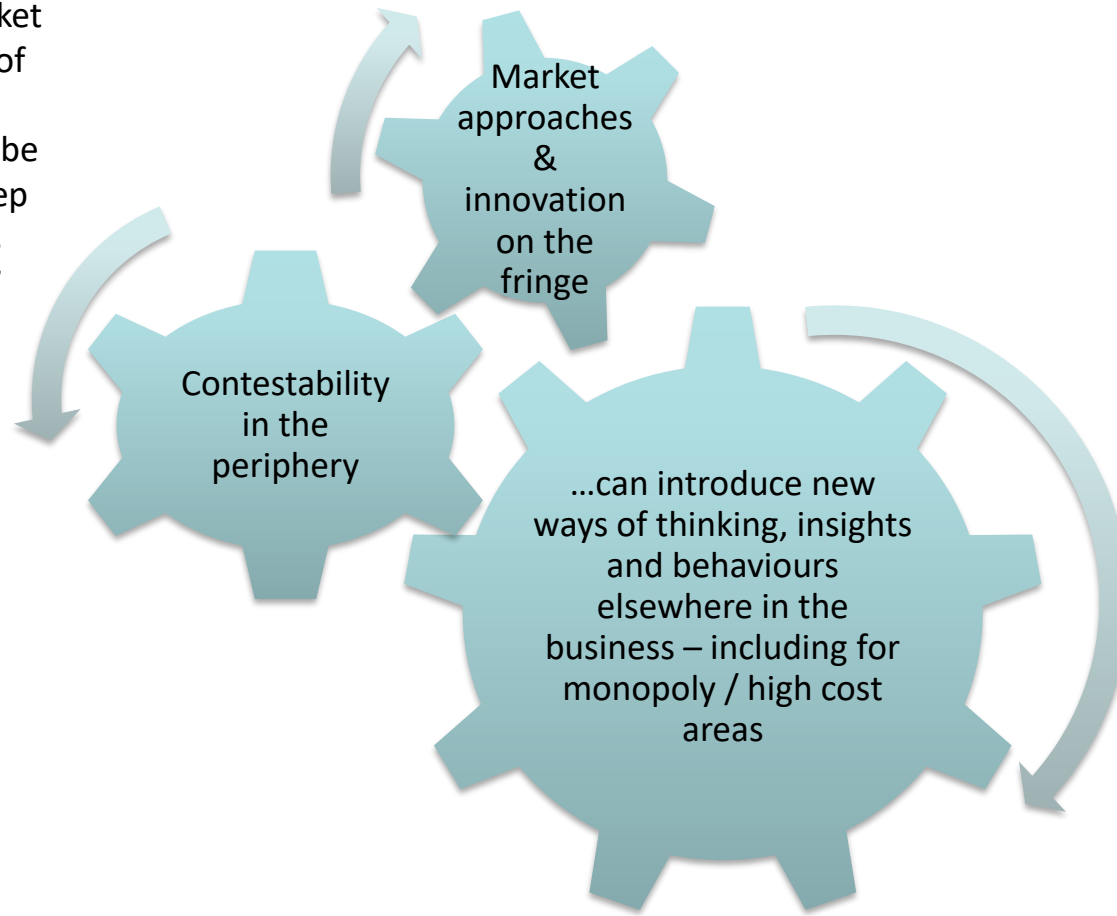
If these pre-conditions / tests aren't addressed, it is difficult to develop a clear, predictable framework of rules and principles for markets to work within

3. A reminder of the main ‘pre-conditions’ / tests for effective market approaches – and what they may mean in energy and water (ii)

<p>1. Low barriers to entry and no / low transaction costs</p> <ul style="list-style-type: none"> • Low information asymmetries and clarity on value chain / regulatory landscape • Low sunk costs • Access to technology • This means no excessive externalities as addressing these comes at a cost 	<p>2. Separable / discrete activities</p> <ul style="list-style-type: none"> • Clearly defined market boundaries • Modularisation of the value chain • Simple ‘point to point’ activities • Simple, easy to monitor contracts • Need to avoid areas where modularisation may reduce economies of scale & scope
<p>3. Good ‘match’ between asset lives and contracts</p> <ul style="list-style-type: none"> • Clear long-term view of required solutions • Relatively short construction lead times • This means avoiding parts of the value chain where decisions may have a significant impact on future quality of service 	<p>4. Winners and losers</p> <ul style="list-style-type: none"> • One customer will do well at the expense of others • Some businesses may fold • Some assets may be left stranded • This means no excessive risks

3. A reminder of the possible dynamic direct and indirect impacts of market approaches across the value chain

A **threat** of introducing market approaches or of additional regulation may be sufficient to keep market actors 'on their toes'



Market approaches in one area may lead to **completely new markets** being created in another area – whether this is geographically, in another part of the value chain or somewhere else entirely

3. Market theory and practice in the energy and water sectors: Workshop discussion and comments (i)

- Markets are a journey of discovery; it is not always clear what the 'end point' may be
- Things can happen on the way which may be difficult to foresee
- Given the dynamic nature of markets, there was some discussion as to where market approaches should be focused – should this be:
 - on activities where the potential for success is the highest (ie those activities that meet the pre-conditions / tests in slides 24 / 25)?
 - on the highest cost areas?
 - where it is easiest / opportunistic?

3. Market theory and practice in the energy and water sectors: Workshop discussion and comments (ii)

- There was some discussion as to the extent to which the benefits of market approaches in one part of the energy and water value chain might beneficially ‘trickle down’ or ‘trickle up’
 - Can retail markets impact *all* wholesale prices? How far do retailers hedging strategies manage wholesale costs?
 - How does the trickle down theory work with a regulatory ring-fence? Eg in water, Non-Household retail part of the business can’t talk to the wholesaler BUT the wholesaler can benefit from contacts with new external actors
 - Policy costs deliver many of the long-term public interest outcomes. How much influence do retailers have on these? In some areas, they may be out of their hands. In others, such as ECO or smart metering, energy retail competition should drive suppliers to find the most cost effective ways to deliver on their obligations. And with half hourly settlement, costs should be better allocated to where they arise
 - If it is hoped that market activity at the periphery will have a wider positive impact, does it matter *which* periphery?
 - How does the trickle down / up work when the market is defined by the catchment / eco-system / geography (ie in water or with community energy schemes)?

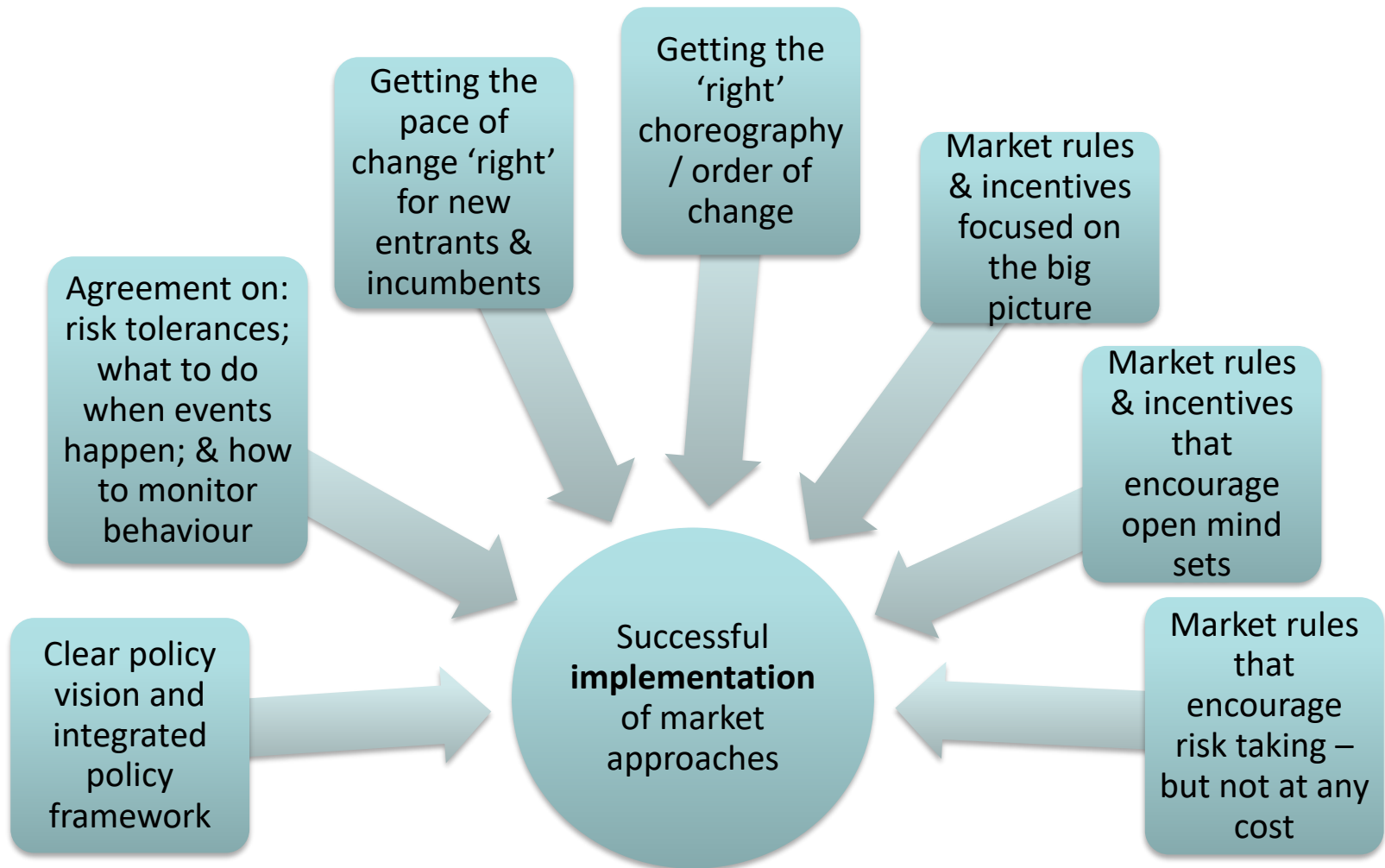
3. Market theory and practice in the energy and water sectors: Workshop discussion and comments (iii)

- Most network members thought that it would seem sensible to focus market approaches where the greatest net benefits were likely to be delivered **and** where there was a clear policy intent
- If the policy intent wasn't clear, it was thought important to focus on areas that would deliver the greatest net benefits to the long-term public interest outcomes
- There could be many markets simultaneously working in one sector
- The issue is therefore more around where to focus limited policy, regulatory and management attention; and how, if this is on areas of limited potential benefits, it can be a distraction from the bigger 'prizes' that markets may be able to deliver
- This is important given the administrative complexity – and resistance– that often accompanies market implementation. This is particularly true where there are multiple regulators, entrenched interests and devolved issues / different national approaches
- Some considered that policy makers were often optimistic about the benefits of markets and found it difficult to know what was actually happening in the market – or only after the event
- Having an agreed view on market behaviour, what a successful market should look like, and what information was needed to assess market health (not just switching data) was thought to be important

3. How market approaches are implemented can help determine whether the long-term public interest outcomes are delivered

- Our analysis suggests that even if markets are the ‘right’ approach in a given area, how market approaches are **implemented** will impact their success in terms of delivering the long-term public interest outcomes
- Given the ‘unchartered waters’ that markets can take both companies and consumers into, managing the political risk around implementation of market approaches is key
- This requires going beyond traditional economic techniques to also include behavioural economics, organisational theory, theories of change, psychology etc
- Successful market implementation is hard. In these sectors, no one actor can implement market approaches on their own
- Incumbents shouldn’t be given the opportunity to entrench their positions – but they clearly have an important role to play in implementation
- Successful market approaches need to be under-pinned by the ‘right’ relationships and getting the ‘right’ signals within a complex web of stakeholders, including
 - Government
 - Regulators
 - Investors
 - Citizens
 - Policy makers
 - Companies
 - Consumers
 - Other

3. Successful implementation of market approaches in energy & water is hard. Here are some issues for consideration for Government, policy makers, regulators & companies



3. Implementation of market approaches by Government, policy makers, regulators & companies: Workshop discussion and comments (i)

- Deciding on how the risks and rewards arising from market approaches should be shared between shareholders, consumers, citizens / taxpayers and executive teams is difficult
- Risks may not crystallise and rewards may not be captured to fit neatly in with regulatory, political or investment cycles
- Market approaches and technological change can mean that the nature of the risks that the energy and water sectors face are evolving
 - In a purely digital world, risks and failure tend to be fast and financial
 - In an engineering and 'systems' world, risks and failure can be slow to emerge and have wider safety or environmental impacts - that may be difficult to measure and capture in contracts

3. Implementation of market approaches by Government, policy makers, regulators & companies: Workshop discussion and comments (ii)

- Having multiple new players in a market can both reduce and increase the risk of failure
 - Reduced risk - greater diversity, new approaches
 - Increased risk - if new players don't have the same obligations or face different 'hurdles' (particularly social and environmental) to existing players. Large players may also be more likely to be able to self insure against risks compared to smaller new market entrants
- If market players aren't true risk takers, and if their risks are actually being underwritten by the state or by all customers, this can multiply risks and lead to moral hazard
- In 'mixed markets' it can be difficult to prevent market actors from hanging on to excess returns – especially if they can avoid risks (via subsidy or guarantees)
- Many network members thought it was the role of government to decide the aggregate level of risk that society should bear, as failure in these sectors will have a knock-on impact on wider society and the economy
- It was thought important for government to work with other stakeholders (consumers, citizens, and investors) to identify and agree the risk tolerances for introducing market approaches in these sectors and how far the current cross subsidy arrangements could continue without significant review

3. Successful implementation of market approaches also needs to take account of consumer behaviour in the sectors

The service – inertia for many

Essential service

Limited choice – risk aversion

Used continuously - high loyalty

Some consumer segments active – blurred supply / demand side

Demand reduction / response

Pro-sumers

Current consumer behaviour in the energy & water sectors

How service is used – complexity

Through appliances, heating systems etc

Increasing principle / agent issues in private rental world

Some active communities – seeking shared societal benefits

Collaborating in production / use

Front-line for resilience when shocks

3. Consumer behaviour and market approaches: Workshop discussion and comments

- In discussion, it was accepted that consumer behaviour in the energy and water sectors could, in theory, change quickly (eg just as people have rapidly adapted to mobile communications)
- Not all consumers are the same; it is important to understand the needs, interests and behaviours of different consumer segments
- There was some discussion around whether consumer behaviour in the energy and water sectors is rational – eg whether it ‘makes sense’ to leave significant potential savings ‘on the table’ (i.e. to not switch to an alternative supplier which would save you money)
- Some network members pointed out that if you are on a very low and variable income and have limited savings, it may be rational for you to stay with a particular company (better the devil you know)
- Many consumers may not have the relevant information to make a rational choice. This may be because of apathy, seductive marketing material or the inability to ask the right questions. Consumers may also lack flexibility over services/packages/time

3. The positive – Areas where market approaches can deliver for the public interest outcomes for each part of the energy and water value chain (i)

Upstream / Wholesale	Networks	Retail
<ul style="list-style-type: none"> • Efficiency, information and price discovery BUT heavily dependent on having clear market rules • Clean - ↓Green House Gases in energy • New partnerships (eg farmers), technologies (eg green infra), approaches (eg local, distributed generation) • ↑ diverse approaches builds resilience 	<ul style="list-style-type: none"> • Efficiency potential and quality service limited to comparative competition & rivalry due to natural monopolies • New partnerships (eg EV & PV pro-sumers), technologies (eg storage), approaches (eg local, distributed) • ↑ diverse approaches builds resilience • Innovation, auto-switching, cultural change & trickle down effects 	<ul style="list-style-type: none"> • Efficiency potential limited due to consumer behaviour (see slide 32) & low margins • New partnerships (eg tech / digital players), technologies (eg automation), approaches (eg Third Party Intermediaries) • ↑ consumer choice & speedier decisions

3. The negative – Areas where market approaches alone won't / can't deliver the public interest outcomes for each part of the energy and water value chain (ii)

Upstream / Wholesale	Networks	Retail
<ul style="list-style-type: none"> • Long-term resilience – unless strategic vision and capacity mechanisms etc 	<ul style="list-style-type: none"> • Efficiency and quality of service (unless regulatory incentive payments) • Resilience – except 'around the edges' • Can make attracting finance to invest in core assets challenging and actually increase Regulated Capital Values 	<ul style="list-style-type: none"> • Efficiency for all consumers without significant impacts on fairness (as current cross subsidies may need to be unwound, price signals may need to get sharper and the unique 'sticky' characteristics of consumer behaviour in the sectors need to be addressed) • Quality of service if race to the bottom on price • Resilience • Clean (unless also include Distributed Generation and energy / water efficiency in retail)

3. Areas where market approaches can and won't / can't deliver for the public interest outcomes across the energy and water value chain (iii)

Positive – what market approaches can deliver across the value chain

- Clean: where there are clear targets
- Flexibility: demand reduction and demand side response
- Blurring of boundaries eg Distribution System Operators
 - Technology creating new paradigms eg Block chain

Negative – what market approaches won't / can't deliver across the value chain

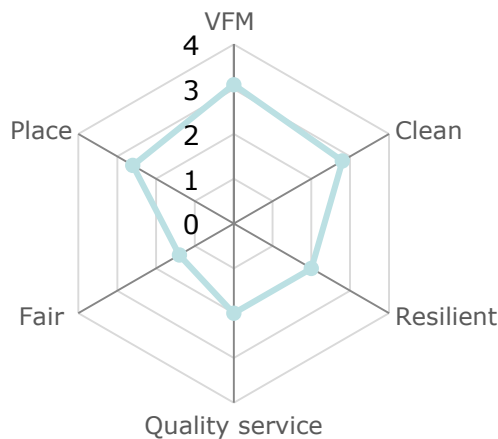
- Long-term goals / outcomes
 - Fairness – within and between generations
 - Some aspects of resilience – eg interdependencies between sectors
 - Place – markets on their own have no regard for geographical fairness / community.
- However, if Government / regulators decide a place needs attention, markets can then help

4. Spider diagrams to show what market approaches can potentially deliver for the long-term public interest outcomes

- We asked workshop participants to individually complete some spider diagrams, indicating which sector and which part of the value chain these related to (a note on how to complete and 'read' a spider diagram are at Annex 2)
- We asked them to consider what market approaches can potentially deliver in that area (ie not what they currently deliver)
- In the following two slides we report our findings of the results for those areas that had the highest number of completed returns (people also completed diagrams on energy generation, energy efficiency, water household competition and wastewater but as there were limited numbers of these we haven't reported on these)
- For each part of the value chain reported on, we have taken the average score given by those completing a spiders web in that area and where appropriate, indicated the range of results
- We then carried out a high level analysis of the results
- **Caveat – this analysis is based on limited numbers of network members completing the exercise for each part of the value chain. The numbers involved are small**

4. Network member assessment of what market approaches can potentially deliver in different parts of the energy value chain

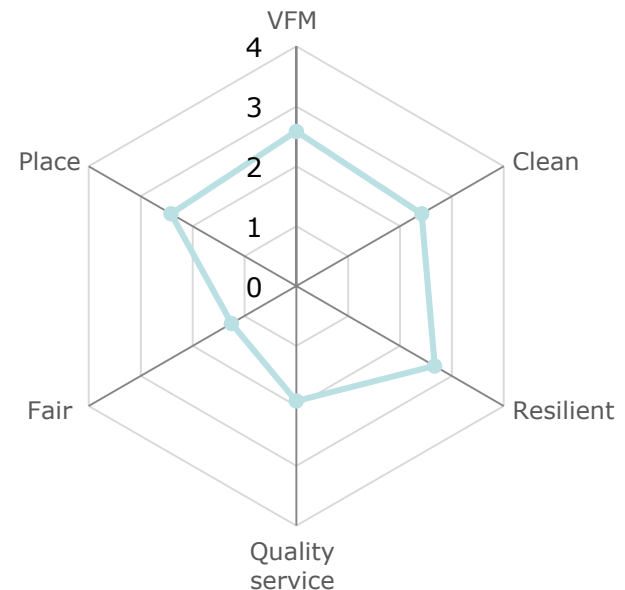
Energy retail market – potential long-term public interest outcomes



Notes

Number of responses: 5
Some limited alignment of views on all outcomes except quality where there was a wide range of views

Energy networks – potential long-term public interest outcomes

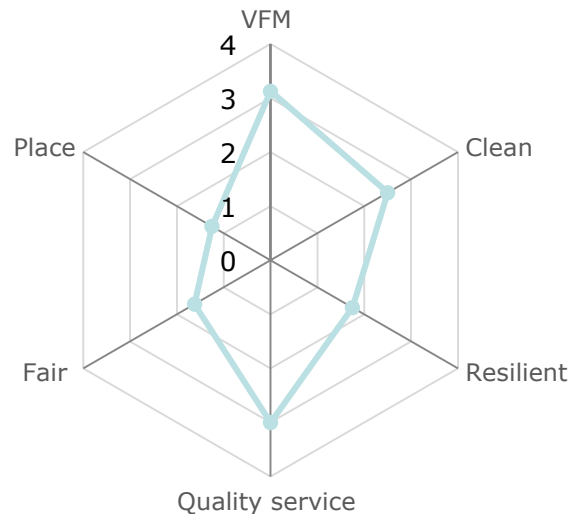


Notes

Number of responses: 6
Wide range of views on all outcomes except for quality and fairness where

4. Network member assessment of what market approaches can potentially deliver in different parts of the water value chain

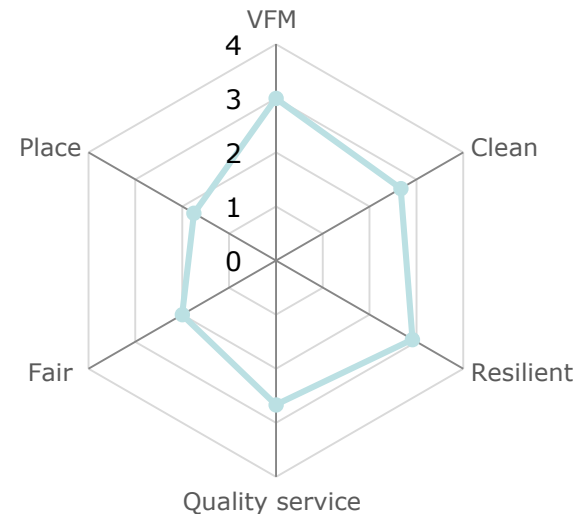
Water Non Household Retail market – potential long-term public interest outcomes



Notes

Number of responses: 4
Close alignment of views on all outcomes except VFM (range on this was 2-4)

Water wholesale market – potential long-term public interest outcomes



Notes

Number of responses: 6
Range of views on all outcomes except fairness where strong alignment

4. Spider diagrams – Commentary on findings

- In neither the energy sector nor the water sector were market approaches seen by Network members as being able to deliver the full range of public interest outcomes on their own
- None of the outcomes assessed consistently reached the highest potential score across all respondents
- There was more agreement / a greater convergence of views on what market approaches can deliver in the water sector than there was for the energy sector
- Outcomes with the highest scores – indicating that market approaches may be able to deliver in that area
 - VFM – in energy retail and water non household retail and water wholesale
 - Quality – in water non household retail
 - Resilience – in water wholesale
- Outcomes with the lowest scores– indicating that market approaches may struggle to deliver in that area
 - Fairness – in both sectors and for all parts of the value chain
 - Place – in water for both parts of the value chain examined

5. Workshop perspectives on how far market approaches can deliver the long-term public interest outcomes in energy and water

Markets in these sectors need clear frameworks and rule sets

Markets in energy and water are imperfect

Markets don't deliver outcomes – they only enable them

Markets are the worst approach to delivering the public interest outcomes - except for all the others

Markets in water will need a burning platform

Markets *plus* state administered redistribution of wealth does deliver the optimum societal welfare

Markets are rational. Consumer behaviour is irrational

Markets are journeys of discovery

With market approaches, Government is loading increasing responsibilities onto utility companies. This just moves costs onto consumer bills – it is regressive!

5. Different perspectives on how far market approaches can deliver: A water company – Alex Plant, Anglian Water

- Although markets are important, the public interest is not delivered by markets alone
- In the water and energy sectors you need a mixed approach
- Ensuring public interest outcomes are met is the Government's and not the market's duty
- The individual interests of consumers and the collective interests of citizens may be different
- Regulation and market actors have a key role but should not supplant the role of the Government in determining the aggregate level of risk that society should bear
- This is because failure in these sectors will 'bleed across' into the wider economy

Discussion

- Large companies can 'self insure' against some of these risks – compared to smaller companies
- With greater cost-reflection, at what point will existing cross-subsidies between different customer segments start to unwind and who should be responsible for monitoring, and addressing, this?

5. Different perspectives on how far market approaches can deliver: A public interest group – Angela Francis, Green Alliance

- Current Green Alliance projects to develop a commercial mechanism for natural engineering solutions to flood resilience demonstrated a ‘trptych’ of regulation, incentives and market approaches is needed
- Governments and regulators can help make space for markets by providing frameworks, as well as enforcement mechanisms
- Maintaining the polluter pays principle and good standards of environmental protection in subsidies and law is necessary to avoid market provision becoming unaffordable
- Joint approach is leading to innovation around ‘slow clean’ water delivered by actors such as farmers to a consortium of buyers who want flood resilience (e.g the Environment Agency, Local Authorities, water and energy companies)
- This approach can only work where it builds ‘on people already behaving well in pollution terms’

Discussion

- Brexit offers the potential for moving from bilateral to multi-lateral agreements for agricultural support which post 2020 could lead to much greater innovation in this area. Farmers could increasingly have multiple routes to market for a wider range of products and services.
- ‘Piloting’ and ‘showing through doing’ approach currently being taken is valuable and would be an important contribution for any discussion around a possible future Systems Operator for water

5. Different perspectives on how far market approaches can deliver: Energy regulator – Martin Crouch, Ofgem

- The biggest challenge the regulator faces when enabling markets is the tension between providing stability / predictability in the regulatory approach while being responsive to the need to change rules in a timely manner when they are seen as an unnecessary barrier
- ‘Markets are the worst approach to delivering the public interest outcomes, except for all the other approaches’
- To help resolve this tension, Ofgem has implemented a series of publicly available guidelines (Regulatory Stances, Draft Forward Work Programme 2017-18)
- Ofgem is also in the process of building a new evidence base to to inform a forthcoming State of the Market Report, designed to assess how energy markets are operating, including with regard to public interest outcomes

Discussion

- The difficulty of balancing regulatory agility with a desire to attract investment was explored.

5. Different perspectives on how far market approaches can deliver: Academic – Catherine Waddams, Centre for Competition Policy at the University of East Anglia

- The Centre are developing an interdisciplinary project on justice and equity in the energy market ('economists think they know what they mean by fair but not justice')
- The regulator plays an essential role setting the framework based on desired long-term public interest outcomes
- However, once markets are set up they need time to run and see if desired outcomes are reached or not. Markets are journeys of discovery where different actors play key roles and where unforeseen consequences arise
- Sometimes adjustments / interventions may be needed; for other issues, you may need to give things time and not interfere or correct outcomes by other means
- Policy makers need to be clear what their tolerance levels are to different impacts and unintended consequences and not be unduly 'optimistic' about the benefits that markets may bring

Discussion

- It is important to have a common understanding of what is tolerable, what the 'rules of the sport' are and what the success criteria might look like
- Markets aren't static; useful information can emerge in the process and that once started, you have to keep travelling on the journey
- If baseline regulations aren't being enforced there can be a vacuum in decisions
- Collaboration is already difficult; market approaches can make the role for collaborative approaches unclear

6. Deep-dives into three areas where market approaches may find it difficult to deliver against the long-term public interest outcomes

- In the workshop, we asked Network members to be ‘**CEO for the day**’ of an incumbent company working within the current frameworks but looking forward
- We broke into three groups, each taking a deep-dive into an area where interviewees had told us markets may struggle to deliver the long-term public interest outcomes
 1. ‘**Fair**’ – future smart retail markets
 2. ‘**Clean**’ – commercial services
 3. ‘**Resilient and VFM**’ – strategic investments via market-led approaches
- Each group considered the current context in that area and the barriers and enablers to **potentially** delivering the long-term public interest outcome under discussion
- The slides in **Annex 3** set out the context in which market approaches are working in each area, the questions that group considered and a summary of their discussions
- In the workshop deep-dive break out groups, **fairness** was the only public interest outcome explored that participants thought **could not be delivered by market-led approaches**

7. Conclusions: Choosing the most appropriate 'tools for the job'



The division between contestable and non-contestable approaches isn't clear cut

However, from left to right, there are increasing degrees of difficulty in delivering via contestable / market approaches alone

7. Conclusions: Markets need frameworks and rules to deliver long-term public interest outcomes

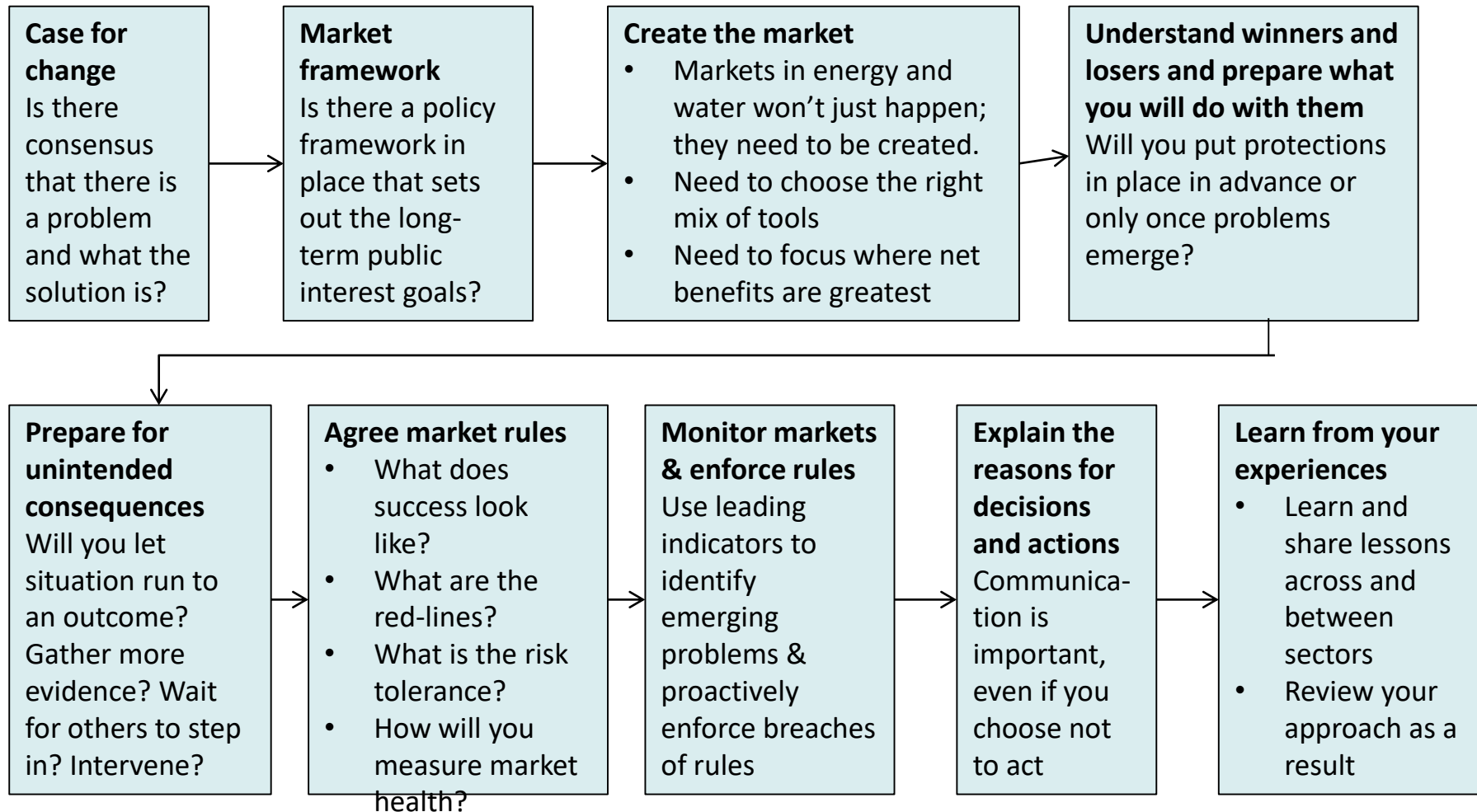
- Market approaches can provide new information and bring in new skills and partners, leading to innovation and more efficient, responsive & flexible services
- Markets can deliver against many of the public interest outcomes - but not on their own
- Markets need frameworks and rules to work - along with monitoring and enforcement mechanisms. These things rarely emerge on their own
- A mix of market-led tools and interventions are needed to deliver the long-term public interest outcomes in energy and water
- Technological changes, particularly around smart and big data, are also providing an opportunity to revisit the middle ground of managed markets as commercial approaches blur the boundaries between activities
- Policy makers and regulators need to 'get out of the way' but not disappear; they need to do things differently and 'keep watch'
- It is hard to generalise about what works and what doesn't. What works well in one part of the value chain won't necessarily work elsewhere.
- Market approaches in one area can lead to knock-on impacts and unintended consequences on the delivery of public interest outcomes in other parts of the value chain
- As markets are dynamic, this is clearly not a static situation
- There are multiple variables - it is a complicated jigsaw. A case by case and evolving approach is

50 needed

7. Conclusions: Winners and losers in the delivery of long-term public interest outcomes via market-led approaches

- Markets by their very nature create winners and losers
- It can be difficult for markets to deliver outcomes that people don't 'usually' pay for
- The public interest outcomes that markets struggle to deliver on are those with
 - Social externalities - fairness and place. Markets will unwind cross subsidies and make existing inequalities more pronounced
 - Environmental externalities - the longer-term aspects of other public interest outcomes, such as resilience and sustainability, where there are likely to be winners and losers not only within generations but between generations, and between the requirements of people and the environment
- For these outcomes, much clearer frameworks and rules will be needed
- To minimise the political risk here, it will be important that market rules and risk tolerances are **agreed** between stakeholders – and that the consensus around this agreement is maintained over time
- Consumer, citizen and community engagement is essential for this to happen
- Effective implementation of market approaches in energy and water is inevitably hard and requires co-operation across a range of different actors
- To succeed, it is important that implementation takes account of the pace and choreography of change, the incentives placed on different actors and reflects the reality of consumer behaviour in the sectors

7. Conclusions: Possible approach for thinking about markets and the long-term public interest in the energy and water sectors



7. Conclusions: Recommendations on market led approaches for delivering the long-term public interest – for government

- At a strategic level, set out an integrated package of long-term public interest outcomes to be delivered (via Strategic Policy Statements etc)
- Define the outcomes that they think should be delivered and say how strategically these should be measured
- Understand and articulate the principles and what the commonly agreed ‘rules of the road’ for markets in the sectors should be; ie what the risk appetite and tolerance of consumers, citizens and investors is to things not going to plan
- Deal with fairness and place. As these are major public policy issues, policy makers need to:
 - Build consensus as to what they mean
 - Take a view on the most appropriate tools to deliver these outcomes; it may be through interventions or local co-operative / collaborative solutions
 - Ensure appropriate co-operation and co-ordination between government departments and regulators to enable delivery

7. Conclusions: Recommendations on market led approaches for delivering the long-term public interest – for regulators

- Monitor if markets are going in the right general direction in terms of delivering on the integrated package of long-term interest outcomes. This isn't the same as picking winners, dictating the route or being prescriptive but about being aware of unintended consequences and keeping watch on leading indicators
- Hold the ring on maintaining the consensus as to what an acceptable level of risk is. This involves clear and proactive communication and engagement with all key stakeholder groups – and honestly and promptly telling policy makers when risks have broken tolerance levels
- If policy makers are not stepping in to deal with 'fairness' and 'place' outcomes, regulators need to spell out the implications to them. These problems will not go away. Dealing with them indirectly is inefficient, potentially regressive and erodes trust
- In this evolving context, take a view as to what long-term public interest outcomes can be delivered
 - By new entrants
 - Through the regulated asset base of licensed companies with Universal Service Obligations

7. Conclusions: Recommendations on market led approaches for delivering the long-term public interest – for companies and citizens / NGOs

For companies

- There is little stopping companies following market approaches and innovating
- If incumbent companies think that they can't do something, they should turn the question around and ask why they can't
- Companies should assume that on certain issues they can collaborate; this is often a 'mind-set' issue
- Companies should accept that if they want to 'play' in sectors such as energy and water that deliver essential services and have environmental impacts, they need to
 - Meet their license obligations and respect regulatory rules
 - Consider their positioning in terms of social, environmental and commercial issues and the associated impact that these can have on their reputation
 - Work with other companies in the sectors to show leadership in addressing social & environmental externalities; particularly if these have systemic impacts

For citizens groups and NGOs

- There is a real value in forging creative partnerships in markets. To succeed, these need: access to the opportunities; support; and capacity building

8. Next steps for Sustainability First following this workshop

- As well as the revised slide deck we have also produced a **one page info-graphic** to aid discussions within your organisations on market approaches and the public interest
- In our **'Tomorrow's World' workshop on 18th July 2017** we will explore how responsibilities with regard to the long-term public interest outcomes should be dealt with by individuals, communities and nationally
- The New-Pin **workshop on regulation and innovation on 15th November 2017** will look in more detail at the regulatory 'side of the coin' that we have started to discuss today
- At the end of the New-Pin project we will **revisit the definition of our desired long-term public interest outcomes** – once we have explored these from as many different angles as possible
- Today's discussion also raises significant wider issues for both sectors. Sustainability First will take this discussion forward in our **next project**
- In the coming months, we will be approaching New-Pin members and other actors to discuss how they may want to be involved in the new project.

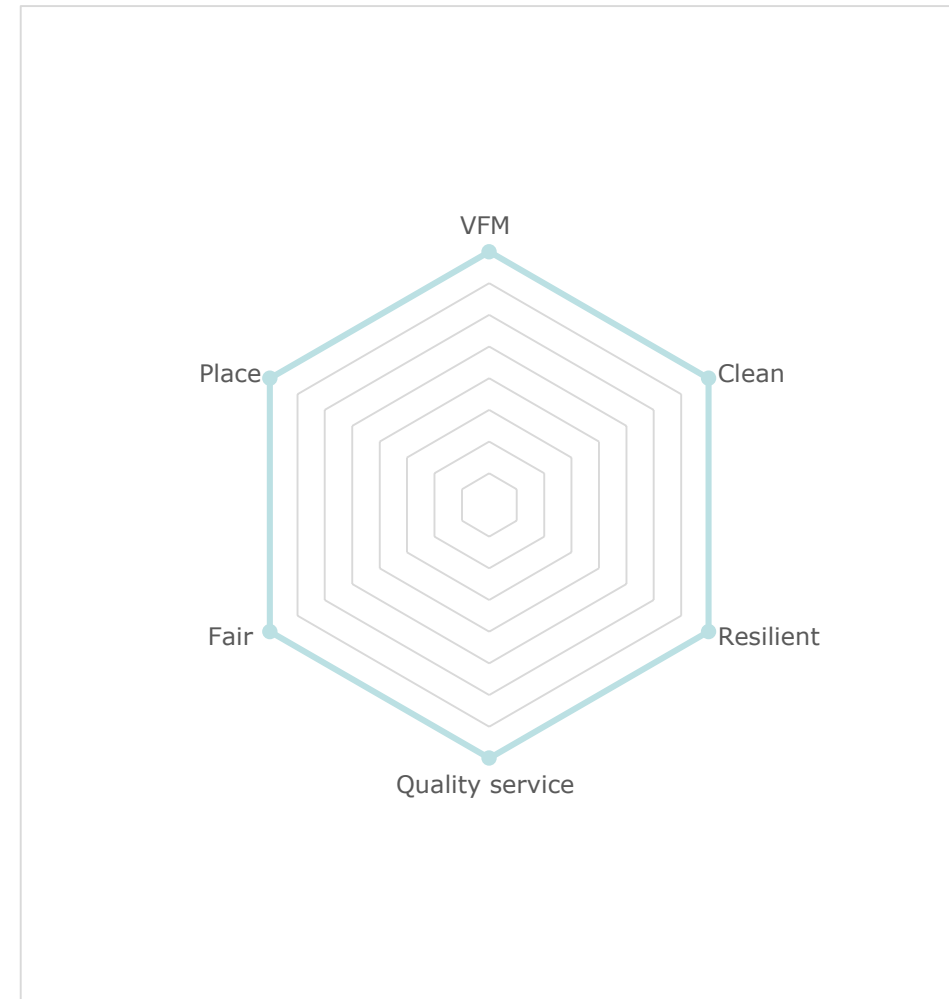
Annex 1: About Sustainability First and New-Pin

- The New-Pin Network was established by charity and environment think tank Sustainability First in 2015
- New-Pin aims to create a strong voice for the long-term public interest in the energy and water sectors
- We have created a unique forum to develop our aims – the New-Pin Network. Participants include
 - Regulators (Ofgem, Ofwat, the Water Industry Commission for Scotland and the Environment Agency) and the UK Regulators Network
 - Government (BEIS, DEFRA, the Scottish Government and the National Infrastructure Commission)
 - Public interest groups (Citizens Advice, Consumer Council for Water, Which, Customer Challenge Group Chairs for water, Green Alliance, the Centre for Sustainable Energy, WWF, Waterwise, the Local Government Association and ShareAction)
 - Water companies (Affinity, Anglian, Southern, South East Water and United Utilities)
 - Energy companies (Electricity North West, Northern PowerGrid, Scottish and Southern Electricity Distribution and Western Power Distribution), NPower and Energy UK
 - Universities (I-Gov team, University of Exeter and the Centre for Competition Policy at the University of East Anglia)
- New-Pin is taking a three pronged approach to the long-term public interest
 - **An in-depth and systematic examination of major long-run public interest topics for the water and energy sectors** - both to inform and to move forward on some ‘hard’ questions with concrete steps
 - **Capacity-building for customer and other stakeholder groups** – to develop tools and to support better engagement on public interest issues with the water and energy sectors
 - **On governance for the long-run public interest** to explore how this is currently brought to regulatory and company board tables, how this might be embedded and sustained, and how boards are informed in practice by stakeholder engagement activity

Annex 2: How to read spider diagrams to show what market approaches can potentially deliver for the long-term public interest outcomes

Spider diagrams may be one way of capturing how far market approaches can deliver against the full range of long-term public interest outcomes

If the web stretches to the furthest extent, as in blue line in the illustration opposite, it means that market approaches in that area **can potentially** fully deliver on each of the public interest outcomes. The closer in to the center of the web for each outcome, the less that market approaches have to offer in that area



Annex 3: Deep-dives into three areas where market approaches may find it difficult to deliver against the long-term public interest outcomes

- In the workshop, we asked Network members to be ‘**CEO for the day**’ of an incumbent company working within the current frameworks but looking forward
- We broke into three groups, each taking a deep-dive into an area where interviewees had told us markets may struggle to deliver the long-term public interest outcomes
 1. ‘**Fair**’ – future smart retail markets
 2. ‘**Clean**’ – commercial services
 3. ‘**Resilient and VFM**’ – strategic investments via market-led approaches
- Each group considered the current context in that area and the barriers and enablers to **potentially** delivering the long-term public interest outcome under discussion
- The following slides set out the context in which market approaches are working in each area, the questions that group considered and a summary of their discussions
- In the workshop deep-dive break out groups, **fairness** was the only public interest outcome explored that participants thought **could not be delivered by market-led approaches**

Annex 3: Group 1: Can future smart retail markets deliver fairness?

Context: Overview (i)

- Technology is rapidly changing the energy retail market, with 50+ players now active and a whole range of Non Traditional Business Models, focusing on different niches eg fair
- A tidal wave that could overtake incumbents – retailers may disappear
- ‘One home services’ world, may be offered free energy to: retain TV contracts; or as loss leaders to foreclose competition? Could this lead to regulatory arbitrage (where providers try and capitalize on loop holes in the wider regulatory system)?
- Smaller suppliers exempt from some license conditions. Free riders with ↓ responsibility for resilience?
- Will these different smart ‘worlds’ be able to co-exist? Does this matter?
- For this type of change to happen **in water**, would need metering (except perhaps in ‘Island’ world – slide 59). Ban on disconnections/ high levels of bad debts also likely to discourage new entrants
- Faster switching & single bills are good BUT...
- Increasing segmentation unwinds cross subsidies (> in water than in energy and significant diversity amongst non household water customers compared to household water consumers)
- Raising questions about what retail is – billing, CRM and metering – or also demand ↓ / response and possible redefinition what the service delivered is in an ‘Island’ world
- As yet no commercial model to align demand ↓ with supplier behaviour. To get active demand side, need full cost recovery and sharp price signals – impact on fair

Annex 3: Group 1: Can future smart retail markets deliver fairness?

Context: Energy retail market is changing rapidly. Here are some examples of future 'worlds' - could be more! (ii)

Dynamic switching world

- Eg Flipper or Money Saving Experts Cheap Energy Club

'One' home services world

- Eg Apple HomeKit, Nest or Hive or possible combined energy / water / communications offers

Local, social (and green?) world

- Eg Bristol Energy (Bristol City Council)
- Eg White Rose Energy (Leeds City Council with Robin Hood Energy)

Island world

- Eg Direct provision by local authority heat networks on private wires in self governing islands (Gateshead?)
- Eg Rural Provisioning of water supplies in Scotland (possible pilots to empower local communities to provide alternative methods of provision to existing poor quality private water supplies)

Annex 3: Group 1: Can future smart retail markets deliver fairness? Questions for the break out group (iii)



- As CEO of a retailer for the day, what are you doing to deliver fair outcomes in the future smart energy & water retail market?
 - Fairness within generations – for customers in vulnerable circumstances and between different customer segments, geographies and places (eg safeguard or default tariffs?)
 - Fairness between generations – if you don't send the right signals to invest for the future?
 - Fairness when an increasing proportion of costs in energy are levy costs that market pressures won't change?
- What more can you do?
- What's stopping you?
- What indicators / evidence can you use to demonstrate that you are addressing the long-term public interest outcomes?
- What might you need others to do?

Annex 3: Group 1: Can future smart retail markets deliver fairness? Break-out group discussion and comments (iv)

Definitions

- Fairness can be ‘narrow’ (limited to customers in vulnerable circumstances) or broad (Just About Managing or ‘won’t pay’ water consumers)
- Need to ask fair to whom; individuals, communities or society?
- Fairness can be measured in different ways: reduced prices; fair processes (eg accessible information and the ability to switch); ‘just’ price differentials; methods of charging etc.

A question of choreography

- Fairness can clearly be achieved in different ways – but there is an important timing issue here
- Do you make the problem worse before you make it better (leading to political risk) or address fairness up front and go for a less targeted approach that may deliver less efficiency?
- Do you accept some consumers may make ‘bad’ choices ie they may not switch and move to cheaper tariffs and that that is, in effect, their ‘choice’? If so, should companies be allowed to charge sticky / loyal customers on Standard Variable Tariffs more? Should companies be responsible for dealing with the distributional implications of this themselves or should a price cap be introduced for Standard Variable Tariffs?
- Note: Sustainability First has explored some of these issues in its recent paper ‘Smarter, fairer? A discussion paper on cost reflectivity and socialisation of costs in domestic electricity prices’

Annex 3: Group 1: Can future smart retail markets deliver fairness? Break-out group discussion and comments (v)

- Do you focus on: making the pie bigger through VFM / efficiency and cost reflectivity so that you have more to give away and only then re-distributing money saved to vulnerable consumers through the state; or having a less optimal / efficient solution through an element of cross subsidy or more uniform charging and a focus on relative prices? Each approach has implications for trust
- The decision as to which approach to take will in part be influenced by the real and perceived appetite of Government to take a lead on redistribution (political antipathy / inertia) and the administrative complexity of any arrangements (eg who has the data)

Barriers

- Lack of clarity on where boundaries of responsibilities lie
- Limited information (eg on usage in the absence of universal water metering and on can't pay / won't pay water customers)

Enablers

- Engagement of consumers & citizens on what is socially acceptable and just
- Building an evidence base on cross subsidies to build a business case for fairness – including what a fair distribution of network and policy costs would look like
- Sharing / triangulating data with trusted third party intermediaries to improve understanding and services for consumers in vulnerable circumstances

Annex 3: Group 2: Can commercial services deliver clean / sustainable outcomes? Context: Overview (i)

- Technology and data are enabling more commercial approaches by monopoly actors that can support networks & services & reduce environmental impacts
- Tariffs and trading platforms for demand side response can ↓ local electricity network constraints & provide eco-system / catchment services in water
- Commercial arrangements can reduce the need for carbon intensive network investments and provide ↓ cost, more flexible & cleaner ways of dealing with challenges
- New services can provide: better information on network assets and asset health potentially delaying the need for investments until there is greater clarity on future needs; and build commercial acumen in the business
- In water, new services can provide upstream solutions to downstream problems such as flooding and pollution
- Commercial arrangements build partnerships with consumers and local stakeholders, which may be beneficial in terms of resilience if the network experiences ‘shocks’, providing local solutions to local issues

Annex 3: Group 2: Can new commercial services deliver clean / sustainable outcomes?

Context: Changes in both sectors. Here are some examples- there are more (ii)

Bilateral contracts

- Eg South East Water (to access new resource in areas where have a water deficit)
- Eg Local bilateral trades to share capacity in a sewage treatment works

New tariffs and payments

- Eg NPg's Customer Led Network Revolution Project (ANM and DSR)
- Eg SSEPD's SAVE and New Thames Valley Vision Projects
- United Utilities SCAMP2 pathfinder (Sustainable catchment management agri-environment income for farmers in Cumbria)

New platforms

- Eg WPD's coming Open LV Project – Platform for App development to meet local energy needs
- Eg Wessex Water's EnTrade online auction for farmers to bid to reduce pollution

New markets

- Eg ENW's Capacity to Customers Project (market in fault response)
- Eg NGET's coming Transmission and Distribution Interface Project (TDI 2.0 - to develop a DSO)
- Green Alliance's proposed Natural Infrastructure Schemes (multi buyer / seller contracts in upper catchment for slow clean water)
- Bio-resources / sludge markets enabling water companies to produce energy

Annex 3: Group 2: Can new commercial services deliver clean / sustainable outcomes?

Questions for break-out group (iii)



- As CEO of a regulated monopoly for the day, what are you doing to deliver clean and sustainable outcomes through new commercial services?
 - How firm/ dependable will new commercial services be?
 - If consumers / farmers decide they don't want to play, will investment still be needed?
 - Will commercial services have a wider impact on the sustainability of the regulated monopoly part of the business?
 - Can commercial services be 'scaled up' - or will they always be a fringe activity?
- What more can you do?
- What indicators / evidence can you use to demonstrate that you are addressing the long-term public interest outcomes?
- What might you need others to do?

Annex 3: Group 2: Can commercial services deliver clean / sustainable outcomes?

Break-out group discussion and comments (iv)

Definitions

- There was some discussion about the definition of clean including ‘avoided externalities.’ Some Network members thought it was possible to price in negative externalities without the polluter pays principle, providing you have clear property rights. Carbon pricing was cited as an example

Barriers

- Fixed boundaries can make collaboration difficult. So too can having different views between regulators (economic, environmental, quality and safety)
- Data access restrictions and ‘closed’ data systems
- New entrants need to be able to ‘see’ the market possibilities; need signals, both at the local and national levels
- Need for a long-term view; new services (and the associated kit, systems, data analytics etc) may not pay back within the regulatory price control period
- Trading rules; these need to be changed to enable value stacking and dynamic charging
- The impact of new commercial services designed to deliver ‘clean’ on the other public interest outcomes eg resilience
- Mind-sets of existing players

Annex 3: Group 2: Can commercial services deliver clean / sustainable outcomes?

Break-out group discussion and comments (v)

Enablers

- Totex: commercial services enable opex solutions where previously only capex solutions would be considered. They enable both delivery against outcomes and good performance as well
- Partnerships eg with Local Authorities
- New regulatory accounting rules in water (make bilateral water trades easier) and coming reform of the Common Agricultural Policy (which will enable new incentives to be given to farmers to change behaviour)
- Examples of where commercial services have already delivered – sharing the lessons from these

Annex 3: Group 3: How can strategic investments deliver resilient and VFM outcomes?

Context: Overview (i)

- Increasing focus in the future on the need for VFM of strategic investments. Also ensuring resilience is clearly important
- People nervous about strategic investments: expense; planning issues; long pay-back times; stranded assets, over investment, gold plating etc
- Deciding if we need strategic investments is the first problem. Is there a need for a guiding mind / national plan? How can the 'monopoly of the plan' be best tested? Who should be responsible for building the evidence base? The NIC? Others?
- As strategic investments are part of critical national infrastructure, Government likely to underwrite some risks. Licensed entity / state will step in if there are problems. Does this lead to potential moral hazard, particularly if contractors do not have strong balance sheets to cope with shocks?
- Is the only space for markets here in terms of financing? Can some actors manage financial risk better than others? Do markets reduce risk or just move it round?
- Formal procurement processes can add rigidity. May work for point to point investments (eg a new pipe or line) but complex networks / systems may need a plan to ensure efficiency etc

**Annex 3: Group 3: How can strategic investments deliver resilient and VFM outcomes?
Context: A wider range of mechanisms for enabling the VFM of strategic investments are emerging – here are some (ii)**

Contracts	<ul style="list-style-type: none">• Eg Licensed companies market testing and letting of contracts through OJEU etc
Competitions for solutions	<ul style="list-style-type: none">• Eg Water company OJEU notices ‘we want water’
Direct procurement for customers	<ul style="list-style-type: none">• Eg Thames Tideway (services, including financing, construction and operation procured from a third party as a separate licensed entity)• Eg Ofgem’s plans for Competitively Appointed Transmission Owners to build, finance, operate and own onshore schemes
Auctions	<ul style="list-style-type: none">• Eg Government initiated capacity auctions

Annex 3: Group 3: How can strategic investments deliver resilient and VFM outcomes? Questions for break out group (iii)



- As CEO of a monopoly network for the day, what are you doing to deliver resilient and VFM strategic investments?
 - How do you ensure that concerns around VFM don't unnecessarily delay investments or lead to complex contract structures that may be difficult to monitor or enforce?
 - How do you avoid 'moral hazard' by entering into contracts where the regulator / government ends up bearing significant risks in order to get the deal done?
 - How do you demonstrate whether the long-term public interest is best served by the regulated licensed entity, and / or an actor on behalf of the government / regulator, contracting or holding a competition for solutions or by direct procurement or auctions?
- What more can you do? What's stopping you?
- What indicators / evidence can you use to demonstrate that you are addressing the long-term public interest outcomes?
- What might you need others to do?

Annex 3: Group 3: How can strategic investments deliver resilient and VFM outcomes?

Break-out group discussion and comments (iv)

Barriers

- Lack of trust on all sides due to: unwillingness to take responsibility for major capital projects; high costs; and historic cost over runs for big projects
- Risk aversion on the part of Government
- Unwillingness for Government to underwrite risks and for costs to appear on the Government balance sheet
- Concerns that shareholders may just want to increase the Regulated Asset Base, particularly as outcomes from infrastructure investment are more certain than outcomes from investment for efficiency

Enablers

- Totex
- National / Strategic Policy Statements that set the strategic vision and cut across company boundaries
- Increasing interest in systems operation (eg the Water Resources South East network)

Sustainability *first*

Sharon Darcy

sharon.darcy@sustainabilityfirst.org.uk

Judith Ward

judith.ward@sustainabilityfirst.org.uk