

MOSL response to PR24 consultation

July 2021

Introduction

Context for MOSL's response

As market operator for the non-household water market in England, MOSL welcomes the opportunity to respond to Ofwat's consultation on PR24. We appreciate the strong working relationship we have with Ofwat and the collaborative spirit through which we seek to resolve challenges in the market, and wider sector.

The non-household (NHH) market represents approximately a third of the total public water supply consumed in England.

As a significant consumer of water, we believe the market and its customers can – and should – make a significant contribution to tackling the immediate and long-term threats that the industry faces; from climate change and rapid population growth to expectations for service and wider environmental pressures such as the need to reduce carbon emissions.

Ofwat states that “In England, it's estimated that there is a 25% chance of the worst drought in recorded history within the next 30 years.” Just this month, the Environment Secretary, George Eustice, designated seven more water company areas as in serious water stress. The purpose of the new designations is to “inform which water companies must consider new options to balance supply and demand as part of their next Water Resources Management Plans.”

Through our [Data Insight](#) we can provide valuable input to water resource planning by improving our understanding of business customers in four key areas: Context, Consumption, Customer and Carbon (see Appendix A).

Water consumption in the NHH market is heavily weighted to the largest customers: just 1% of NHH customers use over 50% of the non-household total. Understanding and influencing the water usage patterns of these customers is therefore key to affecting material change in demand and mitigating some of the water security challenges we face.

We can also better understand how, when, where and why lower consuming customers are using water to target messaging. We know that everything in this market starts with a meter and its data. Our ability to analyse NHH customers' water usage – and therefore contribute to the strategic challenges – requires accurate consumption data. It is therefore vital that as many customers as possible have water meters installed and that the data is read and used.

We are working with our members to address the many operational barriers to effective metering. At the same time, we are also exploring and coordinating the NHH sector's response to the strategic needs for metering, the success of which we believe hinges on the investment that PR24 provides.

MOSL's response to this consultation will focus on the areas we believe we can have the biggest impact, while also being an active voice in wider sector challenges. In doing so we aim to support Ofwat and our water company members in developing a price review framework that is fit for the future and designed appropriately to deliver benefits to customers and the environment and communities in which they live.

This response document accompanies a letter to Ofwat CEO, David Black, which outlines MOSL's overarching commentary on PR24.

If you have any questions on MOSL's response to the PR24 consultation, please email comms@mosl.co.uk.

Consultation questions

Chapter 2 – Ambitions for PR24

Q2:1 Do you agree that the themes we have suggested for PR24 are appropriate for England and for Wales?

We agree with the themes suggested for PR24 and, considering the urgency of the challenges, believe they are the appropriate starting point for improvements over the next five-year period.

MOSL's [2021-24 Business Plan](#) outlines a number of improvement programmes that seek to deliver the same outcomes. These include: an increased focus on longer-term resilience, data and metering and market performance; unlocking value for both market participants and their customers; developing a more granular understanding of customers and their water usage; and enabling space for greater efficiency and innovation. We are keen to work with our stakeholders across the water industry to ensure we develop and adopt a consistent and measurable approach to tackling these sector-wide challenges.

Specifically, in relation to the non-household market and the PR24 themes, we believe:

- ◆ **Focus on the Long term** – there is a strong need to modernise the asset stock of meters. Meters must be accurate, easily located and support new technology for smart meter reading. This is fundamental to data quality and our ability to interrogate consumption data. Collated Water Resource 2019 forecasts for non-household (NHH) customers predict no change to current demand over the next 25 years. We believe this is highly unlikely given decarbonisation will have a significant, but varying impact on different NHH sectors. Working with water companies and the Environment Agency we

have collated geographically referenced polygon data, and spatially linked these to the central market operating system (CMOS) meter points locations. We have found that¹:

- 36% of NHH meter points and 37% of NHH consumption is located in Water Resource Zones classified as having a high water deficit
- 42% of NHH meter points are located in EA water bodies with low water resource availability
- 64% of NHH meter points are located in water company areas designated as in serious water stress (according to latest July 2021 designation)
- 18% of NHH meter points are located in communities at risk from surface water flooding

Enriching CMOS data geographically enables us to cut and align it to different boundaries and scales, facilitating data sharing and collaboration with the wide range of stakeholder groups, including the Water Resource Management Planning (WRMP) regional groups. We encourage Ofwat to promote the importance of collaboration and data sharing to better enable us, as an industry, to plan ahead. We also ask that the NHH sector secure greater consideration in future price reviews for the valuable contribution it can play in long-term sector targets (such as Net Zero 2030, Water Resource Management Planning and [Drainage and Wastewater Management Plans](#)).

- ◆ **Deliver greater Environmental and social value** – there is a strong need to drive and incentivise water efficiency through joined up working between wholesalers and retailers. The water industry is not incentivised to reduce NHH demand, as current focus is on reducing domestic Per Capita Consumption (PCC) with no specific targets outlined for businesses or NHH customers. Retailers are also disincentivised to offer water savings to customers as this directly impacts how much they earn from that customer
- ◆ **Clearer understanding of customers and communities** – there is a strong need to ensure that the data in the central market system (CMOS) is robust and of good quality to support customers' understanding of their water usage and their ability to switch. Better quality customer and premises data will also enable us to get a better understanding of high-level sector benchmarking (i.e. how much water used) and usage patterns (i.e. when water is used and for what). This improved data will help the industry's understanding of sector challenges that will inform water resource forecasting, drive innovation, and enable mitigation. It will also enable water companies to develop targeted messaging on water efficiency to their customers

¹ This data is true as of June 2021. Further analysis is required following the designation of seven more water company areas as in serious water stress, following a recommendation from the Environment Agency and a March consultation.

- ◆ **Efficiency and innovation** – there is a strong need to ensure retailers have the ability to reduce cost to serve to offer innovative services to customers. Whilst some NHH customers have undoubtedly benefited from market opening, retailers still can't make an appropriate profit in many customer bands. This isn't just bad for retailers. It risks stifling innovation, investment, and the development of improved service offerings (including water efficiency and peak demand management), which is bad for customers and the environment. It also means that customers – and Government, Ofwat and MOSL – live with the heightened risk of a large retailer failure. We believe there is a need to balance controlled risk with the benefits of innovation. Without innovation the NHH market will not progress towards active competition, new retailers will not enter the market, existing retailers may choose not to take on new supply points and service to customers may decline.

Q2:2 Do you have comments on the considerations we've identified as relevant to the design of PR24?

We believe the considerations are appropriate in the design of the price review framework. It is essential that the price review is adaptable to meet changing demands and customer expectations. We believe the lessons learnt from PR19 should be applied to future price reviews, ensuring they are clear and embedded in water companies' planning.

MOSL's focus on Data Insight is adopting a "local learning, national knowledge" approach (granular data, national trends) and so we support consideration of the need to reflect local and national diversity. This will help the industry's understanding of sector challenges that will inform water resource forecasting. For example, we know that NHH market consumption varies by region (18%-33%) and that NHH density aligns in some areas to water scarcity. The NHH market should be part of the debate surrounding England's wider water resource planning. There is a need to translate national targets into drivers for local action that deliver better outcomes for customers and their communities.

We also believe there is a need for a coordinated approach to designing the price review and planning appropriately for the future. This will support the development and implementation of best practice across companies and avoid duplication of efforts through various forums, groups, and initiatives. We would ask Ofwat to consider this in PR24 to ensure we better collaborate and share data/best practice as a sector. We would also stress the importance of data standardisation and the use of common schemas, for example NHH customer industry categorisation, and standard data references to ensure that data and insight can be shared across and beyond the water industry.

Q2:3 How should we evaluate our progress, and how can we best develop or use appropriate metrics to do so?

It is essential that progress and improvements can be effectively evaluated. We would encourage Ofwat to work with water companies and its stakeholders, such as MOSL, to develop necessary metrics.

We recognise that the NHH market is one of a number of markets which Ofwat is looking to support and monitor through PR24. However, we believe that clearer targets are required for NHH metering, usage, and

wastage. Focus to date has been on reducing Per Capita Consumption (PCC) for domestic customers, but greater measures are also required to secure the reduction in demand for business customers and to improve the existing and ageing NHH meter stock. We would welcome Ofwat's support in developing these targets through new or, where appropriate, existing frameworks.

MOSL will seek to use the Market Performance Framework (MPF) to drive a number of incentives to improve the quality of data, the taking of meter reads and water companies' performance. For example, we could look to use the MPF to mandate the replacement of ageing NHH meters which are legacy long unread (unread since before the market opened in April 2017).

These MPF measures can incentivise and drive the right behaviours in the more immediate term as we look to develop the MPF in 2022/23. Where the approach requires joint working by wholesalers and retailers this should be targeted through the MPF. However, we also believe Outcome Delivery Incentives (ODIs) have their place in encouraging water companies to put forward funding for meter replacements/smart meter rollouts in their business plans. There are currently no ODIs for the NHH market. We believe this needs to be reviewed as part of PR24 to provide wholesalers the opportunity to support these measures through their business plans (see response to question Q9:1).

Chapter 3 – How we regulate

Q3:1 How can we best regulate the water sector to deliver value for customers, communities, and the environment? Do you agree, or have comments on, our suggestion to maintain our 'building block' approach based on outcomes, costs and risk and return?

We agree with the 'building block' approach and think it is essential that the outcomes regime, in particular, is clear and appropriately monitored. We believe that Ofwat needs to take action to provide stronger incentives to deliver long-term benefits to the NHH market, both within and outside of PR24.

This may include rebalancing the cost of consumption, readdressing cost allocation to better incentivise wholesalers, improving retailer margins and encouraging the investment in smarter metering and in timely and accurate consumption data, for example, through the Strategic Metering Review.

While it is the responsibility of Ofwat to minimise the risk to customers, being too risk adverse may negatively impact the industry's ability to be innovative. We would ask Ofwat to proactively engage with water companies, MOSL, CCW and other key stakeholders to identify opportunities for investment which can deliver long-term benefits to customers.

We also believe that each individual sector should be clear on its obligations in this area. Non-household customers are very diverse – much more diverse than domestic customers and use water for a variety of

purposes depending on their business needs. We need to understand how different industry sub-sectors use water services and this must be reflected in the regulatory framework.

Currently the voice of businesses appears missing from the environmental debate. This is the critical point at which water companies need investment certainty on outcomes and obligations and the space to innovate against how they deliver on those obligations. That in turn will generate the finance and the investment that we need to deliver our longer-term environment plan goals.

We support Ofwat's approach to continue to monitor key markets and adapt how it regulates. We look forward to working with the regulator in taking forward governance arrangements with the aim of moving from industry led to market led self-governance by including wider stakeholder voices and needs. This is a significant part of the ongoing Market Governance Review being led by MOSL and the industry Panel.

With respect to the market codes, the aim is for a Panel, in supporting and enabling market self-governance, to reach a position where Ofwat would only need to intervene in extreme cases.

Q3:2 To what extent is greater co-ordination required across the sector? In what ways might we promote better co-ordination across companies and with other sectors, and how might this benefit customers?

We have seen excellent examples of collaboration across the NHH market over the past 18-months which have led to efficiencies in the way we operate and improvements in the services to customers. The [Bilateral Transactions Programme](#) is one example of this.

This is one of the key programmes through which MOSL aims to make it 'easier to do business' in the market and is one of the most fundamental developments since the market opened in 2017. The programme has required substantial contribution and involvement from water companies, along with other key stakeholders, such as third-party intermediaries and technology providers. Through the lifespan of the programme MOSL has sought to engage proactively with its members to ensure we meet the programme timelines and develop a solution that is appropriate to the scale of the market, intuitive and cost effective and able to deliver benefits to customers.

A further example of collaboration can be seen through the Retailer Wholesaler Group's (RWG's) response to the [Joint Ofwat – EA Open Letter](#) which shows "the collaborative effort demonstrated by trading parties and other stakeholders" to deliver great benefits – in this case in the "coordinated production of an action plan" to deliver greater water efficiency in the business sector. The RWG has played a fundamental role in developing good practice guides to encourage a consistent and appropriate approach to operating in the NHH market. The RWG itself is a clear example of co-ordination across companies.

Further to this, programmes such as the Strategic Metering Review and development of a Market Data Strategy, will continue to require input and expertise not only from across the market, but the wider industry, to deliver benefits to a wide range of customers, service providers and members of the supply chain.

A pre-requisite for water sector coordination is standardisation and transparency, particularly around data and insight, which is often regionally siloed. The NHH market has demonstrated how the industry can work together and agree a common data model for sharing market data. MOSL supports the industry's work around Open Data and will continue to look to collate further data sources where they exist locally into a consistent central resource. Collating data and insight nationally can improve industry understanding of how, when, where and why NHH customers use water services, enabling market stakeholders to create innovative services for their customers more effectively.

We encourage Ofwat to promote better co-ordination across companies by recognising and highlighting good practice and identifying opportunities for the sharing of data and information. It is important Ofwat is seen as a driver rather than a barrier to innovation – to do so it must work closely with water companies to resolve frictions. In designing PR24 and future price reviews, Ofwat should ensure the appropriate frameworks are in place to increase opportunities for increased cooperation and coordination.

Chapter 4 – Increasing focus on the long term

Q4:1 What are your views on the need for greater focus in companies' regulatory business plans on how they will deliver for the long term?

We agree that water companies should focus on delivering for the long-term and the price review should enable and encourage this. For example, in areas such as increasing the smarter metering coverage, instigating challenging meter replacement programmes, and improving overall market data quality. Like water companies, many businesses plan over long horizons and its essential certainty is provided for them, especially where water is essential for their business.

As noted in Ofwat's Review of Incumbent Support for Effective Markets (RISE) report, wholesaler actions to "address wider data quality issues (e.g. improving quality of data held on the central market database ("CMOS") or working with retailers to improve data quality) have been quite patchy both in terms of the form and extent of their initiatives". Wholesalers must work with retailers and have a clear strategy/vision in place to address these concerns both in the short and long-term. This should have greater focus in companies' regulatory business plans and will ultimately support their water resource planning by getting greater quality consumption data into the central system.

We believe greater focus is required by companies to proactively identify, prioritise, and address data quality issues which are preventing the non-household market from flourishing and limiting value added services to customers (i.e. water efficiency).

Q4:2 What should long-term strategies seek to cover and what details should we expect companies to set out in business plans? Would common requirements help us and other stakeholders to understand each company's approach?

Common requirements across wholesalers, particularly for data quality, metering, and core service areas, would provide greater certainty and stability for retailers / self-supply users operating in different wholesaler regions.

We believe there are a number of areas, including technology, tariffs, credit arrangements, incident management and return to sewer, where common requirements, or more specifically, standard structures in developing and using them would better support the delivery of long-term strategies. Different policies, processes and tariff structures across the market add complexity to an already complex market and act as potential barrier to retailers entering the market and risk stifling competition. We have also heard from retailers that they will not operate in certain wholesale areas as it is “too difficult” – this limits choice and service offerings for customers.

Q4: 8 Are there barriers to water companies changing how they deliver their core functions to deliver greater environmental and social value? How can we address any barriers?

“Simple and effective” are at the heart of our purpose as market operator. We know that operating in the non-household market is disproportionately complex compared to other markets.

We believe this complexity, along with the high cost of operating in the market, creates barriers to water companies' ability to adapt, innovate and deliver their core functions to customers effectively.

We believe there are a number of market frictions, as well as embedded structural issues, which are limiting water companies in being able to offer value-added services to customers. In the second year of market opening, Ofwat identified that market frictions were hindering the development of competition. While good progress has been made to address these market frictions, there is still more to do. In the meantime – the market is not progressing towards active competition and water efficiency offerings have not taken off.

It is vital that Ofwat uses its powers to support the resolution of these market frictions and address the structural challenges as a matter of priority. At present, ODI's are solely focused on domestic customers. Funding remains a significant barrier. PR24 must support the NHH market by identifying areas for funding that will have the most significant impact to customers and deliver greater societal value – for example, a focus on metering and data quality to deliver water efficiency (and support decarbonisation).

MOSL must also work with wholesalers (with Ofwat's backing) to minimise market frictions and increase 'headroom' for retailers, so that they can make a fair profit, and thus reinvigorate competition. We propose this through a two-pronged approach:

- ◆ With Ofwat’s encouragement and support, MOSL should continue to work on minimising market frictions, reducing complexity and improving market operational efficiency. For example, MOSL should continue to reduce, simplify and harmonise wholesaler metering and bilateral services, which are fundamental elements of MOSL’s change plan. We do, however, recognise that such changes take time and addressing them in isolation of a wider review of market challenges may not be sufficient.
- ◆ Again, with Ofwat’s encouragement and support, wholesalers could adjust their wholesale charging structures to create ‘headroom’ for retailers. This could take various forms.

Chapter 5 – Strengthen incentives

Q5: 7 Which areas should we be considering targeted challenges for at PR24, and why?

As mentioned, we would welcome the use of targeted challenge on business customers around metering and water efficiency. Through the [RWG Action Plan](#) MOSL is leading on Headline Action 2 – ‘Improve understanding of the nature of NHH water consumption through smarter and better sharing of data’. This work will align with existing programmes, such as MOSL’s Market Performance Operating Plan (MPOP), aimed at addressing data quality (including customer, asset and meter read data) to ensure we build a comprehensive picture of NHH consumption. This can support water efficiency and contribute to wider water savings and it is important that Ofwat has visibility of and inputs to this work.

The need to improve our understanding of NHH sub-sectors has been a key learning from COVID-19. We know that industry types were impacted very differently by the pandemic, but our industry view was limited by lack of consistent, accurate and granular data on NHH industry types. Similarly, we know that NHH industry sub-groups will be impacted very differently by water scarcity and decarbonisation so developing a consistent schema and improving our national understanding of these industry types should be a key focus.

Discussions with Water Resource planning groups and other market stakeholders indicate that having a consistent view of NHH customer industry sub-types is key to forecasting future demand and realising the potential contribution NHH customers can make to mitigate resilience.

Linked to MOSL’s Strategic Metering Review, we will support the RWG in exploring and providing recommendations to the Senior Water Demand Steering Group (of which MOSL is a member) on the possible options for providing NHH customers with accurate and timely consumption data, including considerations for options for ensuring a consistent approach to increasing smart metering coverage and the sensible replacement timescales for the existing NHH meter stock across England and Wales. Ofwat may want to consider targeted challenges for the NHH market including increasing the roll out of NHH smart meters,

existing meter replacement timescales, smart meters for all new connections and a financial NHH customer service incentive such as the Business Customer Measure of Experience (B-MeX).

Chapter 6 – Reflecting customers’ preferences

Q6:1 What are your views on the merits of our proposals for a collaborative approach to standardised and/or nationwide customer research to inform company business plans and our determinations?

Standardised / nationwide customer research will be beneficial, especially for understanding business customers’ needs by different sectors, but emphasis should be on complementing rather than supplementing regional customer research. For better coordination we recommend Ofwat engages with groups already expert in the NHH market to help reach business customers, including CCW, MEUC and MOSL.

Whilst we recognise the merits of Ofwat’s suggestion to remove customer challenge groups, water companies must continue to ensure their own research is to a good standard and that customers views (including business customers) are represented.

We are keen to work with both CCW and Ofwat to share our customer insight data through which we have segmented data at three levels – sector, section, and division – using the [Standard Industrial Classification \(SIC\) codes](#). Working with customer organisations like the Department for Education (DfE) has also given us an enhanced view of customers by linking to additional customer data they hold such as pupil numbers and water quality requirements. MOSL has been working with the RWG Water Efficiency group to develop standard guidance for development of data sharing and data processing agreements.

Q6:2 Do you have any suggestions for how we best implement the collaborative approach to customer research for the price review?

Whilst MOSL does not have a direct relationship with business customers, we have undertaken work to better understand granular consumption data and the customer experience of the non-household market through customer personas. The outputs of this data insight work can support wider water resource planning but can also help to build a more holistic picture of the non-household customer journey based on type of customer, sector, and their volume usage.

We believe collaboration and building partnerships is fundamental to the success of industry-wide initiatives and would encourage Ofwat to use the range of existing networks, forums and customer groups to best understand customer motives, water usage, risks and impacts and therefore, how we best engage with customers.

Chapter 8 – Design and implementation of price controls

Q8.1: Do you agree with, or have any comments on, our general approach to the design and implementation of controls, i.e. to retain separate controls with the same broad structure as at PR19, but with improvements to our implementation?

Whilst we would like to see an increase in focus on market related assets in PR24 we consider this can be achieved within existing design and implementation of controls. We do not consider the value of market assets warrants the development of a specific price control. However, we would like to see the PR24 guidance developed and enhanced to mandate a section in the Water Network Plus price control to include investment and improved performance in market assets such as NHH meters and associate meter reading technology.

Chapter 9 - Outcomes

Q9.1 What kinds of performance commitments should we include in the price review? What outcomes require financial incentives for all companies for the foreseeable future?

Currently, we do not believe that PR24 outcomes provide the right incentives for investment in NHH metering assets and would welcome the opportunity to work with Ofwat to develop an improved approach for proactive meter replacement programmes.

Within existing arrangements, the determination provides water companies with a budget for delivering a given number of proactive meter replacements. In doing so, this incentivises water companies to prioritise the replacement of meters that are the least expensive to replace (i.e. the smallest and easiest to access meters), rather than those that represent the largest volumes of water.

Meter sizes in the NHH market range from 15 to 300 mm. We would like to ensure that the business plan outcomes provide at least an equal incentive to replace all meter sizes based on proper investment criteria such as meter accuracy, facilitating metering technology and providing improved services to retailers to provide for their customers.

At the same time, we consider there is an opportunity to strengthen incentives to improve performance with respect to market related assets. We would like to see water companies develop performance commitments and Outcome Delivery Incentives (ODIs) specially for the market, covering, for example:

- ◆ Water efficiency/water consumption reductions
- ◆ Wholesaler tariff complexity (including the removal of tariffs that perversely incentivise bulk usage)
- ◆ Legacy long unread meters (i.e. those unread since the market opened)

- ◆ Long unread meters (i.e. those not read for more than 12 months)
- ◆ Bills based on actual readings
- ◆ Wholesaler provision of additional data to the market e.g. NHH leakage data/logger data
- ◆ Data quality metrics e.g. customer and premises data

It is recognised that for some of these potential performance commitments the water company may not be in full control of delivering the target. We would like to see performance commitments developed that incentivise the wholesalers and retailer to work together to deliver the appropriate outcomes. The driver to invest in the above is currently weak. We need to link investment decisions to outcomes. For example, leakage is currently measured and therefore, given attention by water companies. Targets should be aligned to incentives and reward areas, for example, good customer service, in the same way as it is for the domestic market.

Further focus should also be placed on incentives for water companies to improve their performance in the NHH market. Currently performance standards charges as part of the Market Performance Framework (MPF) are significantly lower than the penalties incurred in the domestic market. They are also capped, which means that once the maximum penalty level is reached, there is no incentive on the trading party to prevent further deterioration in service.

Although a water company may be at the lower end of NHH performance league tables, their charges will equate, at most, to hundreds of thousands as opposed to millions of pounds through ODI penalties. We would ask Ofwat to review the incentives framework to ensure we are incentivising water company behaviours in the interests of *all* customers. We are also keen to work with Ofwat through the review of the MPF to ensure it evolves to complement a regulatory regime that includes appropriate market-focused incentives

Q9:4 What should be our aim in setting the levels of performance commitments?

The aim of setting the levels of performance commitments should be directly linked to environmental and social value. To support this, we believe the focus of performance commitments should be on increasing smart metering/meter reading, improving consumption data to drive water efficiency, and delivering improved customer service. We believe clearer performance commitments are required specifically for the NHH market and we are keen to work with Ofwat to ensure these are developed appropriately.

Chapter 12 - Next steps for PR24

Q12:1 What are your views on the draft timetable for PR24?

We are comfortable with the timeline set out for PR24. We encourage Ofwat to continue to be transparent and engage with its stakeholders during the design process.

We also urge Ofwat to consider the role of the non-household market in developing targets and incentives and in identifying opportunities both through PR24 and beyond, to unlock value and enable innovation in the market and wider sector.

Appendix A: Context, Customer, Consumption and Carbon

In our [2021-24 Business Plan](#), MOSL has outlined a number of improvement programmes which seek to develop and improve our understanding of NHH customers in four areas: Context, Consumption, Customer and Carbon. The specific programmes that address challenges in these areas are the [Strategic Metering Review](#) and [Data Insight](#).

Consumption

- ◆ Our view of NHH water consumption depends on the quality and frequency of meter read data coming into the central system
- ◆ 90% of water supply points are metered but only 77% of meters have had one or more read in the last year - metering success varies regionally.
- ◆ The Strategic Metering Review will cover a range of initiatives aimed at improving meters and meter reading and the market view of NHH consumption. It will do this in three ways:
 - Central data **visualisation** will surface regional trends and patterns around meter characteristics and how meter reads are obtained raising standards across all water companies
 - This in turn will define and drive the **business-case** for a coordinated approach to NHH smart metering that can be fed into the next price review
 - Joint working with water companies will facilitate the **collation** of additional granular meter reading and logger data, not currently shared with the market, enhancing our view of NHH consumption, and enabling local modelling to be developed and then applied nationally.

Context

- ◆ Water security context, from water scarcity to surface water flooding varies geographically

- ◆ Linking supply context to demand consumption enables more effective prioritisation, and tailored messaging that will resonate with customers
- ◆ Working with water companies and the Environment Agency we have collated geographically referenced polygon data, and spatially linked these to the central market operating system (CMOS) meter points locations. We have found that:
 - 36% of NHH meter points and 37% of NHH consumption is located in Water Resource Zones classified as having high water stress
 - 42% are located in EA water bodies with low water resource availability
 - 18% of NHH meter points are located in communities at risk from surface water flooding
- ◆ Enriching CMOS data geographically also enables us to cut and align it to different boundaries and scales, facilitating data sharing and collaboration with the wide range of stakeholder groups, including the Water Resource Management Planning (WRMP) regional groups, within and outside the water industry.
- ◆ MOSL is developing an interactive, self-serve Water Efficiency dashboard that will enable CMOS data to be cut by WRMP, WRZ and WRZ scarcity attributes (due for release in August 2021). This will enable trading parties to view trends and patterns at market level and download more detailed data relating to the supply points they are responsible for.

Carbon

- ◆ We have been developing our market insight around carbon by linking consumption to data on operational carbon emissions for water and sewerage published annually by each water company
- ◆ We can enhance monthly market settlement, creating a carbon tariff and carbon cost alongside the standard monetary based reporting at supply point, trading party pairing and market level
- ◆ Initial carbon analysis suggests the operational emissions from NHH water and sewerage consumption (in 2018-19) was 268 kilotons (12% of the water industry total)
- ◆ More transparent carbon emission reporting will support the industry's goal to be net zero by 2030 as well as customers' own decarbonisation ambitions
- ◆ Customer visibility on the carbon cost of water could provide an additional driver for investment to reduce water wastage, important when bill reductions alone are often not enough

- ◆ Market visibility of carbon could provide the foundation for innovative service offerings to be developed enabling links and synergies with utility providers

Customer

- ◆ NHH customer types are diverse and need to be understood in more detail.
- ◆ We can see some of this customer diversity in the central market data, but more work is needed to improve its quality, quantity, and consistency. Work is underway to:
 - Agree a national NHH classification schema to meet requirements of the industry
 - Improve the quality of industry type data in the central system. We can do this in two ways
 - Driving Trading Parties to improve data through the Market Performance Operating Plan and Market Performance Framework – industry type is a retailer owned data item
 - By building on the pilot work completed last year and taking a “fix from centre” approach – this would involve MOSL working with third parties like Experian and developing a central cleanse and enrichment service.
 - Working with customer organisations like the Department for Education (DfE) and the golf sector gives us an enhanced view of customers by linking to additional customer data they hold such as pupil numbers and water quality requirement. This will help the water industry to get a better understanding of:
 - High-level sector benchmarking (how much water used)
 - Usage patterns (when water used / and for what)
- ◆ This will surface outliers for trading parties and customer representative organisations to investigate and help the industry’s understanding of sector challenges that will inform water resource forecasting, drive innovation, and enable mitigation