

## Research and Library Service Briefing Note

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Des McKibbin

# Water pricing in Europe

#### 1 Introduction

Water has long been considered a social good and the idea of it being traded as a commodity has often been treated with contempt. There is however widespread recognition that providing water for free leads to waste and inefficient use. This paper will examine the EU Water Framework Directive which, since 2010 has required member states to implement pricing mechanisms, designed to encourage sustainable water usage. This paper will examine how pricing has been managed across Europe and will analyse how the Northern Ireland Executives policy of subsidising water supply affects compliance with the Directive.

## 2 Water Pricing

Domestic policy and legislation sit within the framework created by Europe. European Union (EU) water policy forms an important part of the wider European drive to protect human health and the environment. The main overarching legislation is provided by the Water Framework Directive (WFD) (2000/60/EC), which requires member states to have an integrated approach to managing inland and coastal waters. The WFD was transposed into national legislation in 2003, as required by Article 24 WFD.

The WFD encourages the use of economic instruments to achieve environmental objectives. Article 9 required Member States to ensure, by 2010, that water-pricing

policies recover the costs of water services and provide adequate incentives for the sustainable use of water resources.

It is worth noting that the WFD merely requires Member States to "take account of the principle of cost recovery." The WATECO guidance on the implementation of the WFD acknowledges that the WFD "will not prevent Member States deciding on the level of cost recovery of the water services being identified" as long as this is "reported on in the river basin management plans". This means in practice that member states can decide on adequate levels of cost recovery for each economic sector (households, industry and agriculture), allowing a degree of flexibility, while the Directive also allows member states to take into account social and economic considerations when establishing the level of cost recovery for different users.

## 2 Water Pricing to Water Tariff

Where water pricing has been implemented, the leeway described above, allows member states to establish different policies for tariff levels and structures. All EU countries now have water pricing systems; however unlike the majority of their European counterparts the Republic of Irelands Government meet the full capital costs for the provision of water services to domestic customers, while in Northern Ireland the Department for Regional Development subsidise the bills of NI Water customers.<sup>2</sup>

#### Water tariffs

According to the OECD [Organisation for Economic Co-operation and Development] report on water pricing, revenues from water pricing are derived from the following components:<sup>3</sup>

- A one-time connection fee, to gain access to the service.
- A recurrent fixed charge
- A volumetric rate (where a meter is used)
- Minimum charge

Different forms and combinations of these elements give rise to the following tariff structures:

- Flat rates: in a non-metered environment, customers pay a flat rate regardless of the consumption. This can be uniform, or differentiated based on customer characteristics
- Single volumetric rates: in a metered environment, a single rate per cubic metre is applied regardless of volume consumed

<sup>&</sup>lt;sup>1</sup> WATECO (2003), "Common Implementation Strategy for the Water Framework Directive (2000/60/EC: Guidance Document No 1, Economics and the Environment)", p. 76.

<sup>&</sup>lt;sup>2</sup> Northern Ireland consumers contribute £109 million for water and sewerage services through the regional rate

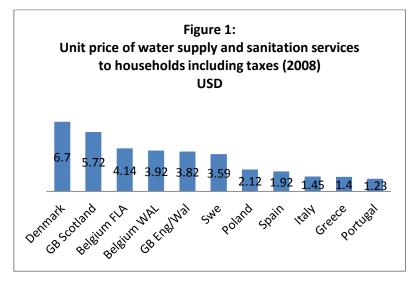
<sup>&</sup>lt;sup>3</sup> OECD (2010) "Pricing water resources and water sanitation services". OECD: Paris

 Increasing block tariffs (IBTs): The volumetric charge changes in steps with volume consumed

- Adjusted IBTs: either the volumetric rates applied to each (price) block or the sizes
  of the blocks are adjusted based on specific customer characteristics (e.g. family
  size, income).
- Decreasing block tariffs: the volumetric rates decline with successive consumption blocks.

#### 3 Tariff levels in EU

Figure one shows the average price per cubic metre of water and sanitation services faced by households in a selection of EU countries. The data shows the huge variance in price, with Denmark the most expensive region, almost six times more expensive that Portugal. This according to the OECD is due to the Danish policy of passing on the price of supplying water to the consumer, while the high price in Scotland is attributed to the fact that meters are not used.<sup>4</sup>



Source: OECD (2010)

#### **Tariff Structures**

Table one shows the complexity of the tariff structure among different EU countries. It clearly demonstrates that there is a high uptake of metering across Europe, although as discussed, this is not the case for Scotland where a flat fee is applied based on Property value. The data does also show that even within countries many different tariff structures exist, and this is linked to the degree of centralisation of the water industry i.e. decentralisation leads to diverse pricing and administrative structures. Table one shows Sweden and England/Wales use a combination of a flat fee (unmetered) and volumetric rate (metered) while the pricing structure for Northern Ireland includes a connection fee and flat rate charges based on property value for domestic

<sup>&</sup>lt;sup>4</sup> OECD (2010) "Pricing water resources and water sanitation services". OECD: Paris

customers (these are covered by the Department for Regional Development). Non domestic customers in NI are metered, the tariff structure was not provided.<sup>5</sup>

Table 1: Tariff structure across a variety of EU countries

Country	Connection Fee	Flat Fee	Type of Tariff					
			T1	T2	Т3	T4	T5	<b>T6</b>
Denmark	<b>√</b>				<b>√</b>	<b>√</b>		
Finland	<b>√</b>					<b>√</b>		
France	<b>√</b>					✓		
Germany						<b>√</b>		
Greece				✓			✓	
Italy	<b>✓</b>						✓	
Luxembourg						<b>√</b>		
Netherlands	<b>√</b>					<b>√</b>		
Norway	<b>√</b>					<b>√</b>		
Poland					✓			
Portugal	<b>√</b>						✓	
Spain	<b>√</b>						✓	✓
Sweden	<b>√</b>	<b>√</b>		✓	✓	✓		
Switzerland	<b>√</b>					✓		
Northern Ireland	<b>✓</b>	<b>√</b>						
Eng and Wales		<b>✓</b>				<b>√</b>		
Scotland		<b>√</b>						

#### Tariff Types:

T1 = Constant volumetric rate with no fixed charge

T2 = Constant volumetric rate + fixed charge

T3 = Constant volumetric rate + a minimum charge + fixed charge

T4 = Increasing block tariffs with no fixed charge

T5 = Increasing block tariffs + fixed charge

T6 = Increasing block tariffs + a minimum charge + fixed charge

Source: OECD (2010)

<sup>&</sup>lt;sup>5</sup> NI Water (2010) Northern Ireland Water Scheme of Charges 2010-11[online] available from: <a href="http://nia1.me/63">http://nia1.me/63</a>

## 4 NI compliance with WFD

This paper has demonstrated that current NI Executive policy with regards water charging complies with article 9 of the WFD, as pricing structures are in place and tariff levels clearly specified. The official position of the DRD is that:

"It is considered that households make a contribution towards the costs of water and sewerage services through contributions paid through the domestic Regional Rate. It is estimated that this contribution equated to about half of the level of funding required to provide services to domestic customers in 2008/09. The remaining funding requirement is raised through central Government taxes."

To help meet the sustainable water use aims of the Water Framework Directive, the Water and Sewerage Services (Northern Ireland) Order 2006 Order places a duty on NIW to promote the efficient use of water by customers through marketing, education etc. The independent Utility Regulator has the power to enforce this duty.

The most obvious consequence of not passing on the water tariffs to domestic customers is the burden this places on the DRDs budget. NI Waters's latest business plan, PC10 assumes that domestic billing will not be introduced during the PC10 period (2010-13). Table 2 shows that the cost to the executive will therefore average over £240m per year over the period of the plan, a subsidy that accounts for over 66 per cent of NI Waters Revenue.<sup>7</sup>

Table 2: Forecasted revenue generation and sources for NI Water 2009-13

Year	2009/10	2010/11	2011/12	2012/13	
Forecast Revenue (2007/08 prices -£m)	-	357	365	371	
Domestic subsidy (%)	65.92	66.72	66.59	66.59	
Domestic subsidy (cash – £m)		237.75	243.05	247.05	
Non-domestic subsidy (%)	3.48	3.81	3.86	4.00	
Income from Charges (including road drainage charge) (%)	30.60	29.92	29.55	29.41	
Total (%)	100.00	100.00 100.00		100.00	

Source: NI Water (2010)

<sup>&</sup>lt;sup>6</sup>Wording regarding Article 9 in River Basin Management Plans published in December 2009

NI Water (2010) Price Control 2010: Public Summary [online] available from: