

Malta's revenue from environmentally relevant taxes was 'just above the EU average. Environmental taxes stood at 2.57% of GDP in 2019 (EU-27 average: 2.37 %). The largest portion of the environmental taxes were the energy taxes at 1.31% of GDP, below the EU average of 1.84 %. Transport taxes, at 1.01% of GDP, were well above the EU average (0.45%), as were taxes on pollution and resources at 0.24% (higher than the EU average at 0.08%). In the same year, the environmental tax came to 8.05% of total revenues from taxes and social security contributions (above the EU average of 5.76%)¹.

Further options

A pay-as-you-throw scheme to increase reuse and recycling

In 2016, Malta had a landfill rate of 83% compared to a recycling rate of only 7%. Recyclable waste is disposed of in a number of ways: recyclables can be placed in grey or green bags for home collection (including plastic, paper, cardboard and metal cans or tins), deposited at a Bring In site (for glass) or, if bulky, can be brought to a Civic Amenity site. Home collection is organised by local municipalities. Additionally, a DRS for glass bottles, metal cans and plastic bottles is to be introduced imminently. Neither a landfill tax, nor an incineration tax have much

political support; a measure which more directly impacts the behaviour of householders is required, and the proposed PAYT will build upon the tax on residual waste bags already in place.

The scenario results show that a PAYT would have small negative effects on GDP and employment in a scenario without revenue recycling. However, when the tax revenues are recycled back into the economy, the negative effect could be mitigated and GDP could even increase by 0.03% and employment by 0.08% in 2030.

Examples of economic instruments

WATER SUPPLY TARRIFS AND METERING FEES

Household water consumption in Malta was effectively supported until the year 2000. From the mid-1990s, however, awareness began to increase about the need to use water optimally and to make users more accountable for their water consumption. In 2010, following the issuing of a Maltese River Basin Management Plan (RBMP), groundwater abstraction metering fees were adopted, and water supply tariffs were increased. In 2011, the Malta Water Association (MWA) was formed, and in 2012, a national conference on water consumption and scarcity was held by the Malta Chamber of Commerce, Enterprise and Industry to debate water pricing. The first RBMP was then updated in the 2nd Water Catchment Management Plan, published in 2016.

How it works

Water users receiving potable and non-potable water from the public supply must now pay a <u>water supply</u> tariff. Water supply tariffs are applied to water users based on the amount of water used, and metering allows the correct level of tariffs to be charged. A 'rising block' structure is used: water use to a certain volume is charged at one rate, and water use exceeding that volume is charged at a higher rate. Residential and domestic users are charged a flat-rate annual service charge of €59 per m³ used, as well as a tiered variable consumption charge of between €1.40-5.40 per m³ per person per year. Charges to non-residential users are structured similarly but at different rates. Variable consumption charges account for 70% of revenue, whilst fixed annual charges account for 30%.

Water users from the agricultural and commercial sectors are required to pay $\frac{1}{2}$ metering fees for all significant groundwater abstraction sources they operate. Metering fees are paid for meter installation (ϵ 765) and annual metering fees per groundwater source (ϵ 143), among others. Some exemptions on metering (and associated fees) can be granted.

Water supply tariffs are collected by ARMS Ltd., a

subsidiary to the Maltese Water Services Corporation (WSC). In 2010, water supply charges were applied to 16 million m3 of water consumption. In 2011, the WSC received around €58 million in revenue from sale of water and related services (similar in 2014 and 2015); around 50% of which came from the residential sector, 29% from the non-residential sector and 21% from the domestic sector.

What it does

Consumer charges recovered around 88% of the total costs of water services in Malta in 2014. The water supply tariffs and metering fees do not appear to have had a significant impact on the amount of water provided through the public water supply. Groundwater abstraction remains a significant pressure for the country's two main mean sea level aquifer systems. In the period 2004-2014, groundwater abstraction per capita increased by 35% (from 77 m3 to 104 m3), and self-abstraction by the agricultural sector for irrigation purposes (for which no price is charged) doubled. Since self-abstraction of groundwater is not subject to the water supply and metering fees, it has been suggested the water supply fees may be acting as an incentive for self-abstraction.

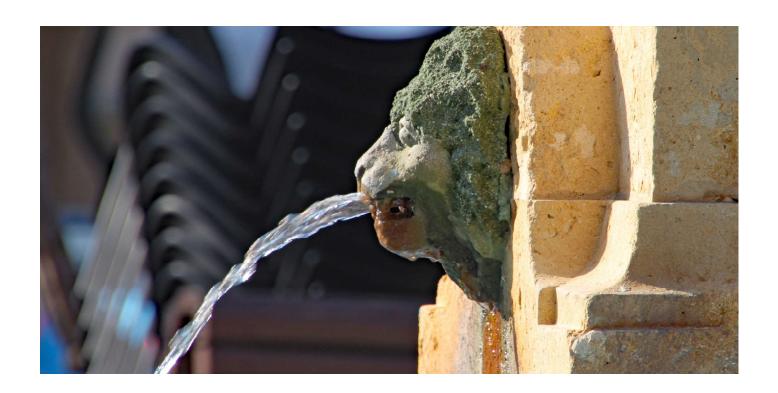
Stakeholder engagement

Although not specifically related to the water pricing instruments, in the creation of the 1st and 2nd Water Catchment Management Plans, relevant stakeholders (agriculture, ports/navigation, water suppliers, NGOs, fisheries/aquaculture, local authorities, transport and tourism) were actively involved. The public was consulted via internet, media and an international trade fair. The draft RBMP was available through the internet, and sector specific workshops and ad-hoc meetings were held. Long-term educational campaigns on the value of water conservation were designed to provide an opportunity for stakeholders to engage with the relevant authorities about water use, and potentially allow them to express their views on instruments that support Maltese water policy. Specific participation

from the public includes the MWA presenting its views to government on developing a coherent water policy in 2013, and the Today Public Policy Institute publishing a report arguing that Malta needs an integrated national policy framework on water in 2015.

As of August 2020, the draft third river basin

management plan, covering the period 2021 to 2027, was open to public consultation, with plans to reduce Malta's dependency on groundwater extraction and increase the use of highly-filtered urban wastewater. Submissions concerning the water management plan can be made until February 19, 2021.



CONTROL VEHICULAR ACCESS (CVA)

IN VALETTA

The Control Vehicular Access (CVA) system was launched in Valetta in 2007 to provide easier access to the city, reduce congestion and utilise parking spots better. The new CVA system replaced an older system, called the Vignette system, where access and parking in the inner-city was restricted to drivers who paid €46 a year for a Vignette displayed on their vehicle (other vehicles were prohibited from entering).

How it works

The CVA system allows any vehicle to enter the city of Valetta under a time-based 'pay-as-you-go' billing system. The system makes use of Automatic Number Plate Reading (ANPR) technology and dedicated camera systems (27 cameras located throughout the city) to

monitor and photograph vehicles entering and exiting the CVA boundary. The system then automatically calculates the time the vehicle remained inside the Valletta CVA boundary and finally computes the fee due for access and parking based on the tariffs issued by Transport Malta. Access for the first 30 minutes is free; access for over 30 minutes and up to 60 minutes costs €0.82; access for over 60 minutes costs €0.82 per hour up to a maximum charge of €6.52.

What it does

The new CVA system is a market pricing system that encourages a more efficient use of limited resources. The system incentivises individuals to drive less in the centre (the more one drives in the centre, the more one gets charged) and it discourages parking for long periods of time (the longer one parks for, the more one gets charged). It therefore incentivises better use of

both roads and parking places (both a limited resource) and reduces traffic congestion as a result. In addition, the charging structure is flexible and can be tweaked according to supply and demand. Parking surveys carried out pre- and post-implementation of the CVA revealed that on a typical weekday, 9.5% fewer vehicles parked in Valletta. The number of vehicles parked at peak time (10:00-11:00) reduced by 26.7% and the average parking duration went down from 3.9 to 3.5 h. By the third year of operation (2010), the number of vehicles entering the zone declined by 2%, and 10% of trips had shifted from private to public transport modes (comparing 2010 with 1998, when the V-licence regime was still in place). Even though it is hard at this point to attribute this shift completely to the change from a parking fee to a road user charge, the Valletta projects, of which the CVA is a major component, were the most influential measures to affect travel behaviour. In addition, the new system was designed to increase accessibility to the city centre – a wider group of people can now come in, not just those with a Vignette license. Before the CVA system was introduced, only around 32,000 unique vehicles with a Vignette license could enter Valletta. By 2013, more than 325,720 unique vehicles had entered Valletta.

The impacts of the scheme on the quality of life of residents and the general environment have not been properly assessed yet. Issues of charging, equity and fairness are currently being discussed in the media.

Stakeholder involvement

According to the Mayor of Valletta, the success of the CVA project was thanks to the collaboration between various stakeholders and government before its launch. A team of experts was appointed by a special Cabinet Committee of the Maltese Government dealing with National Projects, and was tasked with writing the policy, designing the scheme and subsequently implementing what would be later termed the Valletta projects. In 2005, the Cabinet Committee for National Projects published a consultation document called "Valletta and Floriana: A strategy to improve access", which incorporated the views of the major stakeholders in accepting the problems of the city and its suburb, Floriana, and proposed a number of projects. The stakeholders included local councils, national authorities, merchant associations, local associations and general trades' unions. The outcome of the consultation and the results of the questionnaire to stakeholders were included in the document, revealing the stakeholders' views on the proposed separate charges for access (fixed basic charge) and parking (varies over time) within the charging zone. Following a year of public consultation, in July 2006, the four Ministers presented their final decisions, reflecting the Government's attempt and methods used to gain public support for the Strategy during the process of consultation. At the public launch of the White Paper, a number of stakeholders were present and declared their support. This gave credibility to the Strategy as well as providing Government with enough comfort and drive to pursue the project.



Key stakeholders

Academics working in this field

Malta's Water Scarcity Challenges: Department of Agricultural and Biosystems Engineering, Iowa State University

Control Vehicular Access in Valetta: Geography Department, Faculty of Arts, University of Malta

NGOs (environmental, consumer, green business networks, citizen science groups, etc)

Green Roads Malta wants to facilitate transportation and mobility solutions that can improve safety, optimise travel, reduce private vehicle dependence and help cities to encourage alternative ways of transport and reduce the environmental impact of transportation

<u>Project Aegle Foundation (PAF)</u> Its mission is to advance sustainable mobility solutions improving Malta's

traffic situation, thereby enhancing quality of life and environmental conditions for the Maltese population.

Useful links:

Scicluna, M. (2015) Imminent water crisis, in Times of Malta Wednesday May 6 2015, http://www.timesofmalta.com/articles/view/20150506/opinion/ Imminent-water-crisis.566982

Water Services Corporation (WSC) (2016a) Tariffs, http://www.wsc.com.mt/Information/Tariff

Roberts, L., M. Cremona and G.J. Knox (2015) Why Malta's National Water Plan Requires an Analytical Policy Framework: Report Published by The Today Public Policy Institute

Easton, P. (2013) Malta: Confronting Water Challenges, Spring 2013



Linguistic version	Media/Volume	Catalogue number	ISBN	DOI
EN PDF	PDF/Volume_01	KH-03-21-294-EN-N	978-92-76-39074-9	10.2779/175271

¹ https://ec.europa.eu/eurostat/databrowser/view/env_ac_tax/default/table?lang=en

² Attard, M., and Ison, S. (2015) The effects of road user charges in the context of weak parking policies: The case of Malta. Case Studies on Transport Policy. Vol.3, No.1, pp.37–43

³ Attard, M., and Ison, S.G. (2010) The implementation of road user charging and the lessons learnt: the case of Valletta, Malta, Journal of Transport Geography, Vol.18, No.1, pp.14–22