

Initial Results of the Gozo Pilot Project

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Conservation of Water



Distribution of Water Saving Kits was undertaken during February/March 2013

Initial data on water consumption now available

Comparative analysis of water consumption data in Fontana for April 2012 and April 2013.



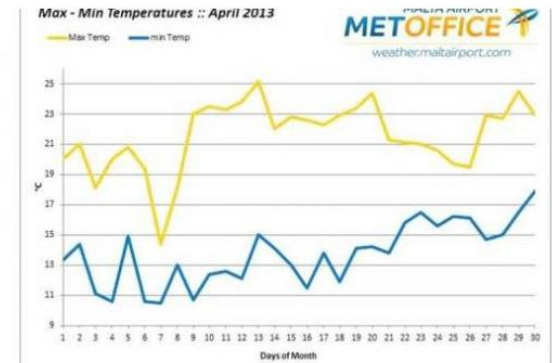


Background Conditions

Favour an increased consumption of water

News

Last Updated 01 | 05 | 2013 at 11:08



Warmest April in the last 90 years

Article By: di-ve.com news
editorial@di-ve.com



April 2013: Warmest April in the last 90 years



Easter 2012 – Sunday 8th April
Easter 2013 – Sunday, 31st March

Potential impacts:

(i) Increased tourism (domestic) in 2012 as compared to 2013 – decreased consumption

(ii) Increased departures in 2012 as compared to 2013 – increased consumption

The screenshot shows the website www.visitMALTA.com with a navigation menu including 'What to See & Do', 'Events', 'Places', 'About Malta', 'Plan Your Trip', 'Cozo & Comino', and 'Meetings'. A video player displays an 'Easter procession' featuring a statue of Christ with a crown of thorns and a flag. Below the video, there is a 'latest news' section with the headline 'St. Ona and Rudimentals perform at the MTV'. The main content area is titled 'Holy Week & Easter' and contains the following text:

The celebrations of Holy Week and Easter are primarily of a religious character, taking place in churches where the faithful gather in large numbers to commemorate the passion, death and resurrection of Christ.

Holy Week commences on the Friday preceding Good Friday, when the statue of Our Lady of Sorrows is carried in a procession through the streets of Valletta and many other towns and villages.

On Maundy Thursday - the eve of Good Friday - the seven visits take place, which are the visits to seven different churches, to pay homage to the Altars of Repose.

Good Friday gives a sombre outlook, as churches are deprived of the traditional ornamental style. Late in the afternoon, various towns and villages commemorate the Passion of the Christ with a solemn procession of statues. Each of these statues represents a particular episode in the Passion of the Christ and is carried by bearers. Between one statue and another, some (and in all) participants are dressed as biblical characters who take part in the procession in a dignified manner. Many processions include men bearing a cross and sometimes dragging chains as well tied to their bare feet, as an act of faith or penance.

The mood changes totally on Sunday, when the ringing of church bells announces the Resurrection of Christ. Mid-morning on Easter Sunday, a procession with the statue of the Risen Christ moves along the streets accompanied by band playing festive tunes. At the end, the way is cleared and the statue-bearers take a run to carry the Risen Christ triumphantly back into the church.

Easter day is traditionally celebrated with a special family lunch. It is also a time to visit relatives and friends, exchanging good wishes and small presents. It is also tradition to give children chocolate-coated Easter eggs and a 'figolla', almond-filled pastry in the shape of a rabbit, lamb, fish or heart, covered in long sugar.



Fontana

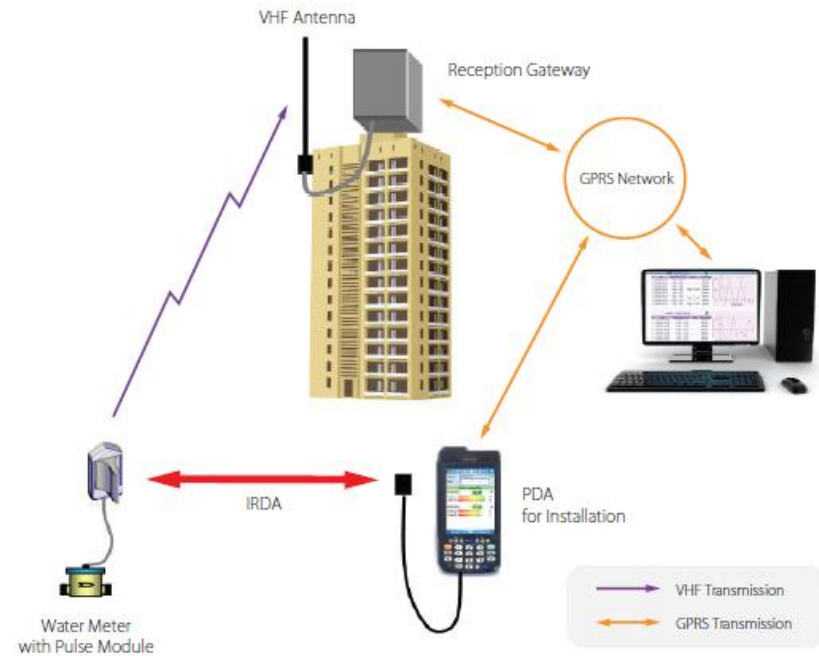
WSC – 578 active meters

478 fitted with an RF module

470 meters are correctly associated and reachable

91 meters did not have readings for April'12 and April'13

Analysis undertaken on 379 meters



WSC – AMM Fixed Network Infrastructure

Based on 379 meter readings:

Total Consumption in April 2012
1,666,456 litres

Total Consumption in April 2013
1,540,022 litres

A reduction of 126,434 litres or 7.6% of water consumption



Further data analysis:

- (i) 60 meters have zero consumption in both April'12 and April'13 – premises not in use
- (ii) 14 meters have a flow in April'13 but zero flow in April'12 – premises which started to be inhabited after April'12
- (iii) 20 meters had a consumption in April'12 but zero consumption in April'13 – premises uninhabited during April'13

These meters have to be excluded from the analysis

Horizontal Considerations:

Wide range in water consumption:

Highest consumer: 23,087ltr in 1 month

Lower consumer: 1ltr in 1 month

Consumption still needs to be verified against the number of persons registered as using the 'water account'.

Consumption Range (Ltr)	Accounts	Water Consumed (Ltr)
0-999	59	18,382
1000-4999	103	297,243
5000-9999	74	533,767
10000-	49	669,080

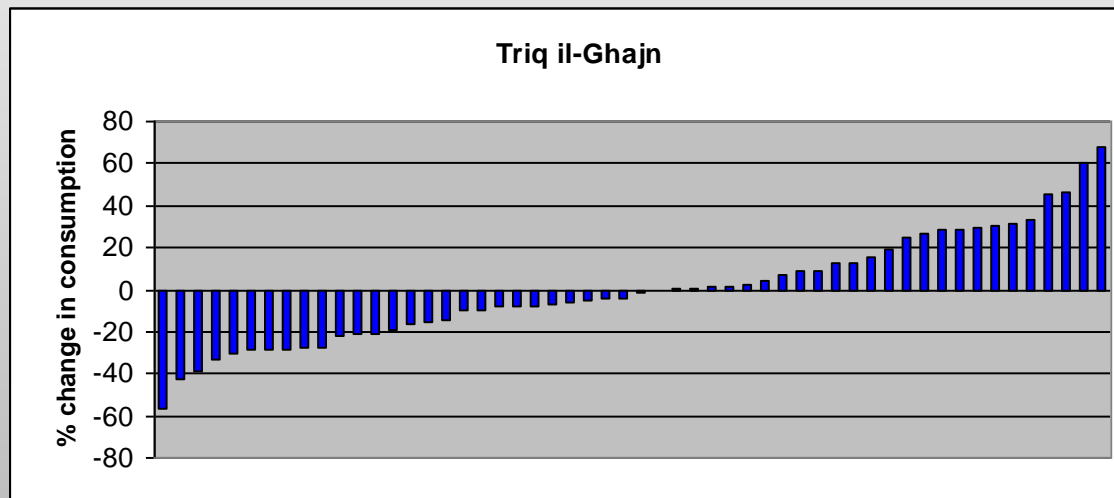
Triq il-Ghajn

167 accounts – 54 readings

of which: 25 show an increased consumption and 29 show a decreased consumption

Global reduction of 13,794 litres over one month

Accounts with reduced consumption have saved a total of 35,192 litres



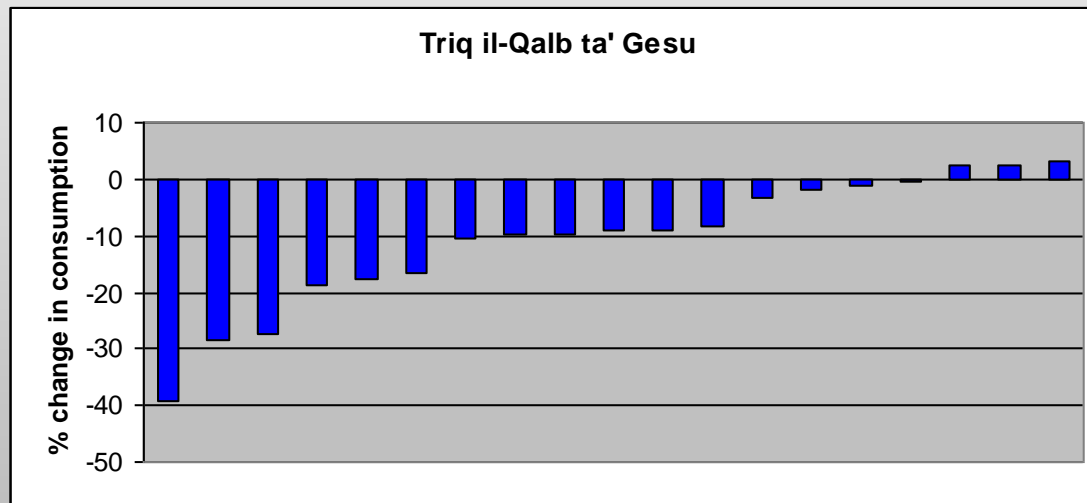
Triq il-Qalb ta' Gesu

41 accounts – 19 readings

of which: 3 show an increased consumption and 16 show a decreased consumption

Global reduction of 11,529 litres over one month

Accounts with reduced consumption have saved a total of 11,892 litres



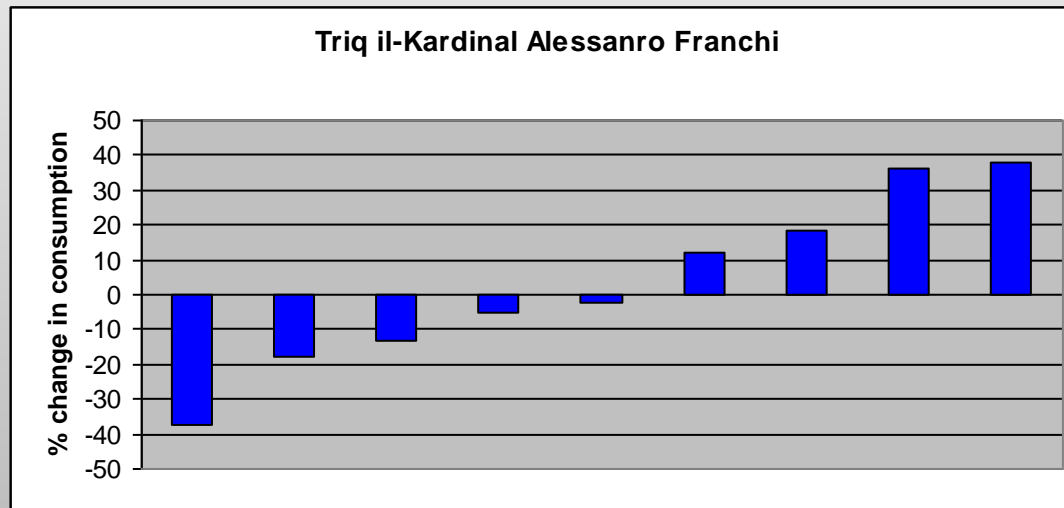
Triq il-Kardinal Alessandro Franchi

13 accounts – 9 readings

of which: 4 show an increased consumption and 5 show a decreased consumption

Global reduction of 2,434 litres over one month

Accounts with reduced consumption have saved a total of 8,893 litres



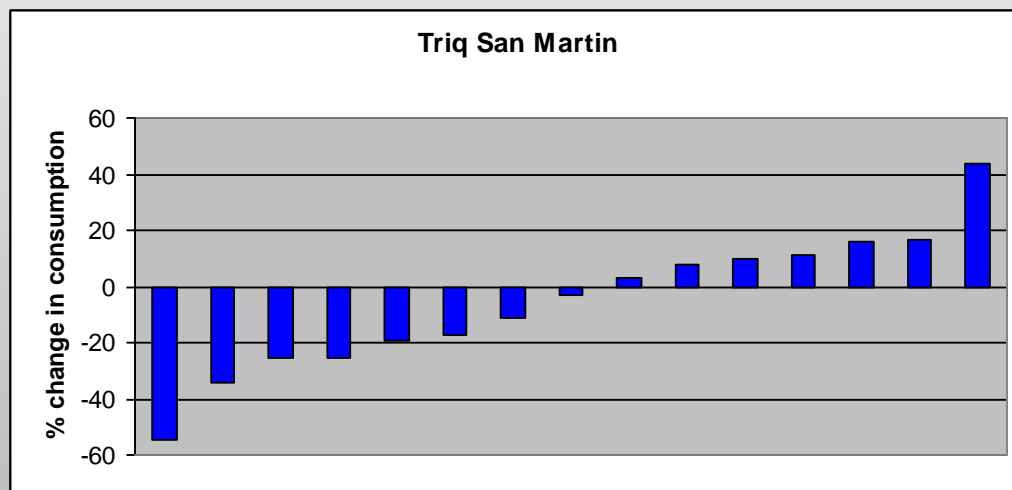
Triq San Martin

26 accounts – 15 readings

of which: 7 show an increased consumption and 8 show a decreased consumption

Global reduction of 7,468 litres over one month

Accounts with reduced consumption have saved a total of 14,079 litres



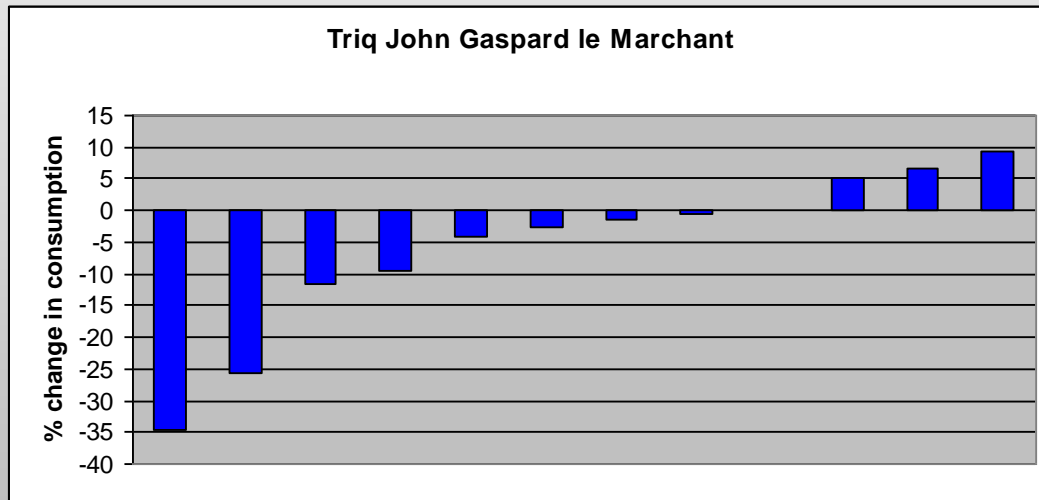
Triq John Gaspard le Marchant

18 accounts – 12 readings

of which: 4 show an increased consumption and 8 show a decreased consumption

Global reduction of 7,122 litres over one month

Accounts with reduced consumption have saved a total of 8,618 litres



There are many factors which can contribute to a change in the water consumed by a household from year to year.

- change in number of occupants
- changes in appliances

Very difficult to verify if the decreased consumption is solely attributable to the 'water saving kits'.

A more detailed analysis focusing on specific cases is required.



Way Forward

1. Detailed analysis of the consumption data of a selected representative sample of consumers
2. Survey of consumers to assess uptake of 'water saving kits' and changes to the household which occurred during the last 12 month period
3. Analysis of data from other localities where other kit typologies were distributed.

Thank you
for your attention

