

## Water can be free!

Mains water supply including sewage treatment was getting more expensive in the past, and this will continue in the future. Since the price increase is not to avoid we shall look for alternative water sources. The best solution – Rainy's rainwater harvesting system, which covers approximately 50% of daily water demand.

Water is employed for different household appliances. Obviously, drinking water quality is absolutely unnecessary for some high consumption

applications like toilet flushing, washing clothes, lawn or garden watering, car washing or house cleaning. Valuable drinking water may be replaced by rainwater for those activities – saving our money and natural resources.

Specialists have made the approximate calculations of water consumption of an average European citizen. The daily demand is approx. 130 liters water for one person. The typical applications are as follows.

### Drinking water demand

~50%

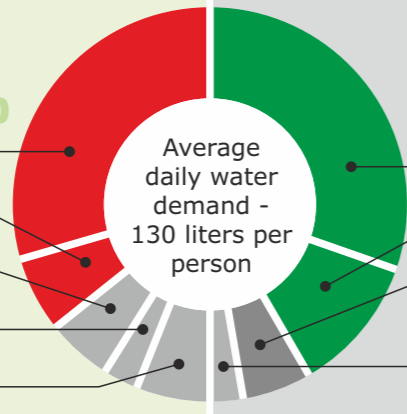
Bath/shower - 39 l

Dishwashing - 8 l

Personal hygiene - 8 l

Cooking/drinking - 3 l

Other - 6 l



### Possible rainwater use

~50%

Toilet flushing - 39 l

Washing mashine - 15 l

Garden watering - 9 l

Car washing - 3 l

Typical household water applications

## How to employ a gift from the sky?

The best way to employ a gift from the sky is to install rainwater harvesting system Rainy's including the underground polyethylene tank. To fill the tank with rainwater the pipeline from the roof shall be connected. No problem with overfilling of the tank, since excess water will be directed to sewer or drainage system.

SNIGO tank is an ideal solution for rainwater collecting and storage. Water is isolated from external negative factors such as sunlight or heat. Temperature range inside the tank is 6-8 °C during the whole year. The cold conditions prevent from mud and microorganisms development in the water.



Snigo tank – Lithuanian product of the year 2011



## Selecting the appropriate size of the tank

When selecting the appropriate tank size, following factors shall be taken into account:

- Annual local rainfall,
- Roof surface area to be connected,
- Water demand.

Number of people	Garden area, sqm					
	0	2	4	6	8	10
0		2200	3200	3200	4600	6600
2	3200	3200	3200	3200	4600	6600
4	4600	4600	6600	6600	8700	8700
6	6600	8700	8700	10000	10000	10000
8	10000	10000	10000	12000	12000	12000



**UAB ENEKA**  
 Vandžiogalos g. 94D, LT-47467 Kaunas, Lithuania  
 Phone +370 37 377441, fax +370 37 377907  
 E-mail info@eneka.lt  
 www.eneka.lt

Inspired By Nature



## RAINWATER HARVESTING SYSTEM



Rainwater -  
 a gift from the sky





## Save drinking water!

This slogan is particularly relevant keeping in mind constantly rising prices of drinking water. Rainy's rainwater harvesting system allows to reduce your drinking water consumption for at least 50%.

Rainwater harvesting system includes following components:

1. Underground tank SNIGO
2. Telescopic maintenance shaft
3. In-tank filter

4. Calmed inlet
5. Siphon
6. Automatic pump
7. Controller\*
8. Electric valve\*
9. Water level sensor\*

\* Mains water refeeding kit (only for Rainy's HOME system)



Lay-out of rainwater harvesting system

## Operation principle – as simple as can be!

The operation of the system is very simple. Rainwater flows from the roof via pipeline and enters the underground tank SNIGO via in-tank filter and calmed inlet. The filter removes leaves and other impurities from the water. Filter basket is equipped with a special handle allowing comfortable lifting up for cleaning. The collected water is stored in the underground tank and is ready to use.

Submersible water pump with integrated pressure switch is turned on automatically in case of water demand. **Just open the tap and water flows!** The submersible pump is a very convenient technical solution eliminating noisy water supply devices in the house, additional small water tanks, drip trays etc. The pump is also equipped with dry-run protection and anti-blocking protection actuating the pump for 1 second every 72 hours.

The refeeding kit is preventing from the lack of

water in the tank. Level sensor is monitoring the water level. If there is a lack of rainwater the sensor is transmitting a signal to controller which is actuating the electric valve to fill the tank with mains water.

Water excess is disposed to sewer or drainage system via overflow siphone. The component separates the pipeline from the tank and preventing from bad smells. The siphone allows to remove impurities floating on the water surface (pollen etc.).



Filter operation

## Rainy's GARDEN system

Who knows, perhaps next summer will be hot and dry again? Those who have a garden may tell how much money and efforts keeping of green lawn and perfect plants cost. After installation of Rainy's rainwater harvesting system you will not be worried about the big bills from your mains water suppliers. Our thoroughly measured and complete system of corresponding components makes use of free rainwater very simple. Rainy's GARDEN system includes:

- Underground tank SNIGO including telescopic shaft and lid
- In-tank filter with plastic basket (filtration rating 1 mm)
- Calmed inlet
- Floating water intake
- Automatic pump
- Overflow siphon

Underground tank SNIGO



Floating water intake



In-tank filter with plastic basket (filtration rating 1 mm)



Automatic pump



In-tank filter with stainless steel basket (filtration rating 0,55 mm)



Controller



Calmed inlet



Overflow siphon

## Rainy's HOME system

Day after day, our valuable drinking water is spent for toilet flushing, washing clothes and garden watering. These household applications do not require drinking water quality. Therefore free rainwater may be of service here! Rainy's HOME system includes:

- Underground tank SNIGO and telescopic shaft
- In-tank filter with stainless steel basket (filtration rating 0,55 mm)
- Calmed inlet
- Floating water intake
- Automatic pump
- Controller
- Electric valve
- Water level sensor
- Overflow siphon

Someone may be questioning the suitability of rainwater for washing of clothes. Here may be reminded that rainwater has many advantages against hard mains water. The softer rainwater helps to use less washing powder and to refuse the softeners and descaling means. Some washing machine suppliers even recommend employing of the rainwater for better washing quality and longer machine lifetime.

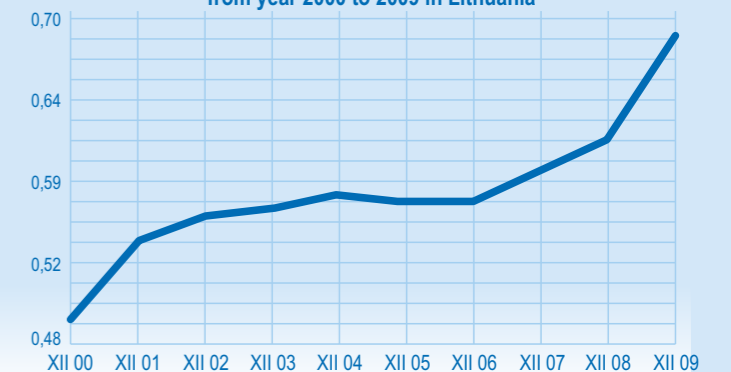
## Why is it worth using Rainy's?

Before answering this question we should look at the trends of mains water cost from year 2000 to 2009. Please note that graph indicates the price of mains water supply only, but approx. the same amount shall be added for sewerage. Only the naive may expect that this curve may turn downwards. The only way to reduce your expenses is to replace the mains water with the free rainwater!

The benefit will be double – not only economical but also environmental. Rainwater harvesting system:

- Saves cost
- Provides high quality water
- Saves natural resources
- Reduces energy cost for drinking water preparation
- Reduces load to the sewage system

The price of mains water supply (Eur/m<sup>3</sup>) from year 2000 to 2009 in Lithuania



© Department of statistics at Government of Lithuania