EU consultatie beleidsopties optimaliseren water hergebruik

Vraag	Concept antwoord	
1. Information about you		
1.1 Your full name and your email address:		
Do you wish your contribution to be made public?	Yes	X
	No	
1.2 You are replying as a(n):	Interested individual/citizen/consumer	
	Stakeholder/expert	X
You are representing:	Private company	
	National authority	X
	Industrial or trade association	
	Utility / provider	
	Local/regional authority	
	Consumer association	
	Non-governmental organization (NGO)	
	European Institution	
	Academic/scientist/research	
	International body	
	Other associations	
	Other	
If responding on behalf of a(n) organisation/association/authority/company/body, please provide the name:	Response on behalf of the Dutch Government. The answers given below are the outcome of deliberation between the following Ministries in the Netherlands	
If responding on behalf of a(n) organisation/association/authority/company/body, please provide its main sector(s) / field(s) of activity:	Sanitation - Agriculture - Economics - Drinking water - Health - Food Industry - Environment / Climate	
1.3 Your country/ies:	Netherlands	
Please specify:	Dutch government	
1.4 Do you live in an urbanised or a rural area?	Urbanised	
	Rural	
	Don't know/Not applicable	X
1.5 Are you aware of water reuse practice in your neighbourhood?	Yes	X
	No	
Please specify: (onduidelijk hoeveel karakters beschikbaar zijn)	: • In the Province South-Holland a pilotproject is set up by cooperation of the local water board and the drinking water company, in close cooperation with several research institutes. Within the project treated water from the local water treatment plant is used as irrigation water for the greenhouses. • KWR Research is studying (on behalf of the Province South-Holland) if the treated water of aforementioned pilot project can also be stored underground to create a yearround, climateproof freshwater supply for the greenhouses in the Westland area. • In the Province North-Brabant the company 'Suikerunie' is working on a project with the intention to reuse their industrial water. At the moment they are already using the water that comes out of the sugarcanes (about 75% of a sugarcane is water). • DOW chemical in Terneuzen (Province Sealand) already reuses its effluents for many years. Approximately 50% of the wateruse of DOW is provided for by reusing industrial water and rainwater. Since 2007 DOW also uses treated waste water of the treatment plan of the city Terneuzen..	

	• In Emmen, a city in the Province Drenthe, the effluents of the water treatment plan are treated to very pure water, used by the 'Nederlandse Aardolie Maatschappij'(NAM) in the process of oildrilling. • In Kaatsheuvel, a city in the Province North Brabant the effluents of a urban waste water treatment plant is further treated with a halophyte filter to provide water for the theme park 'Efteling'. By doing so the amount of groundwaterabstractions are lowered extensively. • Industrial effluents are being reused within the company Cargill in the city Sas van Gent. • The Zoo in Emmen has closed its internal watercycle by reusing treated waste water. The next two projects do not reuse treated water but are on other reuses. • A consortium is studying on behalf of the Province of North-Holland possibilities for the storage and reuse of fresh water for agricultural usage on company level on the Wadden Island Texel for the purpose of irrigation and protecting the crops and flowers against upcoming salinization. • On four locations in North-Holland, Friesland and Groningen the company Acacia Water is doing research (in a consortium) on the possibilities of water reuse and underground storage	
1.6 Are you aware of droughts or water scarcity occurring in the area where you live in the past five years? **Drought** refers to a temporary decrease in water availability, for example when it does not rain over a long period of time. **Water scarcity** occurs when demand for water exceeds the available sustainable resources. Water scarcity situations are not only limited to the southern, drier regions but can occur also in areas in the northern river basins of Europe.	No	
	Yes, water scarcity	X
	Yes, drought	
	Yes, both drought and water scarcity	
	I don't know	
1.7 What do you think is the more important reason for water scarcity in your region?	Human activities	X
	Climate change/Less rainfall	
2. Your perception of the benefits of and barriers to water reuse		
2.1 **Which uses of treated water** do you think are appropriate and should be encouraged, considering that the level of treatment of the water is adjusted in **order** to meet the quality requirements of the intended uses (several answers possible):	Irrigation of urban green spaces	X
	Street cleaning	X
	Fire fighting	
	Irrigation of fruits and vegetables to be eaten raw	X
	Irrigation of golf courses and other sport fields	X
	Bathing waters	
	Irrigation of fruits and vegetables to be processed	X
	Irrigation of cotton and other crops used for clothing products	
	Irrigation of non-food crops (e.g.animal feed crops, energy crops, etc.) and tree plantations	X
	Groundwater recharge	X
	Food industry with food contact	

	Food industry with no food contact	X
	Food industry	X
	Drinking water	
	Cooling (in energy production / industry)	X
	Other industry	X
	Other	
If you identify other important benefits Please specify:		
2.2. Please indicate your views on the level of the following potential benefits of water reuse: a: High b: Medium c: Low d: I don't consider this as a potential benefit e: I don't know	Reduced water scarcity	Medium
	Reduced pollution discharge from urban waste water treatment plants into rivers	Low
	Improved resilience/adaptation to climate change	Medium
	Energy and carbon savings	Low
	Increased resource efficiency (nutrients recycling)	Medium
	Contribution to soil fertilisation	Low
	Cost savings for public authorities	Low
	Cost savings for water users	Medium
	Increased revenues for the agricultural sector (due to higher water availability and productivity)	Low
	Increased revenues for the tourism sector (due to higher water availability)	Don't consider this a potential benefit
	Innovation potential in the water industry	High
	Job creation	Medium
If you identify other important benefits, please specify them:	Developing technology as an export product Possible combination with other reuse issues, like nutrient recovery, energy recovery etc.	
2.3. Please indicate the importance of the following **main barriers to a wider uptake of water reuse solutions:** a: High b: Medium c: Low d: I don't consider this as a barrier e: I don't know	Too high cost of reused water	High
	Too low price of freshwater water	Low
	Insufficient control on (freshwater) water abstractions	Don't consider this a potential barrier
	Lack of awareness on the multiple benefits of water reuse	Medium
	Water reuse not seen as a component of integrated water management (e.g. in scarce areas no incentives to water reuse in place)	Medium
	Fear of potential trade barriers for food products	Medium
	Negative public perception on the quality of reused water	Medium
	Lack of clarity in the regulatory framework to manage risks associated with water reuse	Don't know
	Too stringent national water reuse standards	Don't consider this a potential barrier
	Technical barriers and scientific	Medium

	uncertainties	
If you identify other important barriers, please specify them:	One of the most important reasons why water reuse solutions are not applied in the Netherlands to a large extend, is because the Netherlands is a rather water abundant country and therefore we do not have a significant water scarcity problem on the National scale. Water scarcity may sometimes occur in some specific areas. Even though the industry is looking for innovative ways to reuse water. This shows that even without a big problem and without EU influence water reuse is taken seriously	
3. Your opinion on possible EU measures		
3.1 Please indicate your opinion on the likely effectiveness of the following potential EU measures to **promote water reuse** (where cost-effective) a: Very effective b: Effective c: Slightly effective d: Not effective at all e: I don't know	1. Maintaining status quo: No new EU measure	Not effective at all
	2. Optimising status quo: Increased enforcement of Water Framework Directive requirements on water pricing & freshwater abstraction control, integrated water management and better governance	Not effective at all
	3.1 Non regulatory measure: Develop non-binding EU guidelines on how to foster water reuse	Slightly effective
	3.2 Non regulatory measure: Promotion of forthcoming ISO/CEN water reuse standards as a common reference for the management of health and environmental risks to be used by Member States	Effective
	3.3 Non regulatory measure: Awareness raising and dissemination of information on the various benefits of water reuse, among all key stakeholders/consumers	Effective
	3.4 Non regulatory measure: Non-binding guidance on the implementation of the Water Framework Directive and Urban Waste Water Treatment Directive (e.g.: clarify provisions of the Urban Waste Water Treatment Directive on water reuse; give priority to water reuse among alternative water supply options; encourage water stressed Member States to set targets for water reuse)	Slightly effective
	4.1 Regulatory measure: Legally binding framework to require that MS in water stressed river basins assess the contribution of water reuse and, when relevant, set targets for it, while managing health and environmental risks	Not effective at all
	4.2 Regulatory measure: Legally binding minimum standards on water reuse at EU level *In the present context, the term 'standard' refers to different types of documents that provide requirements, specifications, guidelines or characteristics (e.g. water quality, reuse practices, etc...) to ensure that water reuse projects achieve an acceptable level of health and/or environmental protection*	Effective
If you think other EU measures would be relevant in order to promote water reuse, please specify them:	A background document aimed at an exchange of experiences between Member States on water reuse options to solve particular problems might be very helpful. We have to be aware that there are	

	large differences between the various Member States with respect to hydrological, climatological (etc) circumstances, and therefore water abundancy. As a result of that, whatever may work and may even be a costeffective and efficient solution in one region, may not be relevant nor helpful under other circumstances. Therefore, a one size fits all EU wide approach will not be the most efficient solution. In order to achieve EU wide efficient and costeffective solutions, one has to stimulate and allow for tailor made approaches that are best fit to the problem at hand and the local/regional circumstances.	
Do you consider that a combination of different measures would be necessary to **promote water reuse**?	Yes	X
	No	
Please specify which measures should be combined:	I.e. 3.2 & 3.3	
3.2. Please indicate your opinion on the potential effectiveness of the following possible EU measures to ensure the environmental and health safety of water reuse practices a: Very effective b: Effective c: Slightly effective d: Not effective at all e: I don't know	1. Maintaining status quo: No new EU measure	Not effective at all
	2. Non regulatory measure: Promotion of forthcoming ISO/CEN water reuse standards as a common referential for the management of health and environmental risks to be used by the Member States	Effective
	3. Regulatory measure: Legally binding minimum standards on water reuse at the EU level addressing health and environmental risks *In the present context, the term 'standard' refers to different types of documents that provide requirements, specifications, guidelines or characteristics (e.g. water quality, reuse practices, etc...) to ensure that water reuse projects achieve an acceptable level of health and/or environmental protection*	Effective
If you think other EU policy measures would be relevant in order to ensure the safety of water reuse practices, please specify them:		
Do you consider that a combination of different measures would be necessary to ensure **the safety of water reuse practices?**	Yes	
	No	X
Please specify which measures should be combined:		
3.3. Please indicate what are in your view the main pros and cons, costs and benefits for the possible EU measures, aiming to achieve a higher uptake of safe water reuse in the EU (as mentioned before, the options below could be combined):		
3.3.1 Maintaining status quo: no EU measure - **Pros and Cons** (maximum 1500 characters)	Pros: MS can choose their own approach to/ relevancy for water reuse Cons: No EU incentive for increased uptake of water reuse. The EU wide barriers (like export barriers) remain.	
3.3.1 Maintaining status quo: no EU measure - **Benefits/Costs (in monetary terms)** (maximum 1000 characters)	Benefits: no new administrative burdens Costs: possible revenue loss in the export of agricultural goods	
3.3.2 Optimising status quo: Increase enforcement of WFD requirements concerning water pricing and freshwater abstraction control, integrated water management and better governance **- Pros and Cons (**maximum 1500 characters)	Pros: As stated before, we do not really have a siginificant water quantity problem at the moment. Most of the year in most of the places we have enough fresh water. We are happy with the way we have organised our management of fresh water, This applies to pricing, management and governance. Increase of enforcement	

	would therefore not result in significant benefits. Cons: Increasing the enforcement of the WFD does not necessarily increase the uptake of water reuse but will lead to an extensive administrative burden. The price elasticity of drinking water is very low in the Netherlands: A modest increase in the price of drinking water will hardly be noted by households and will most likely not result in a significant reduction of drinking water use. Water consumption in Dutch households is already relatively modest, for a highly indutrialised country. This is due to the large uptake of water saving options such as water saving shower heads, washing machines etc. More communication on water saving opportunities is likely to be much more cost-effective and efficient than changing water pricing policies.
3.3.2 Optimising status quo: Increase enforcement of WFD requirements concerning water pricing and freshwater abstraction control, integrated water management and better governance - **Benefits/Costs (in monetary terms**) (maximum 1000 characters)	See above
3.3.3 Non regulatory measure: Develop non-binding EU guidelines on how to foster water reuse - **Pros and Cons** (maximum 1500 characters)	The proposal in the background document sounds more like a document presenting experiences than guidelines on how to increase the reuse of water. A resource document on experiences might be very helpful.
3.3.3 Non regulatory measure: Develop non-binding EU guidelines on how to foster water reuse -**Benefits/Costs (in monetary terms)** (maximum 1000 characters)	Pros: Exchange of experiences is a relatively cheap measure. A resource document on experiences offers Member States the opportunity learn about least cost options, that can apply and make them fit to their individual circumstances. It also offers them the opportionunity to read about relevant lessons from other Member States that may have gone through some of the same struggles. By finding least cost options and preventing mistakes, the exchange of experiences will result in serious cost savings (even though the exact size cannot be quantified). Cons: The development of such an exchange of experiences document will cost some time, money and effort of the various Member States, but as we have seen in various other EU trajectories, the benefits (tend to) outweigh these costs by far.
3.3.4 Non regulatory measure: Promotion of forthcoming ISO/CEN water reuse standards as a common reference for the management of health and environmental risks to be used by the Member States - **Pros and Cons** (maximum 1500 characters)	Pros: The same standards apply internationally Less discussion about quality and safety of agriculture products for which reused water has been applied. Cons: “voluntary” standards, not necessarily used by everybody. Industry/farmers etc. can decide to apply the standard. (but if producers that apply those standards are able to apply for a lable (and ask higher prices), and consumers can choose to buy either products with or without such a label, the consumers will show their preferences on the market (cf eco labeling)) Every situation requires its own approach due to local factors and application

3.3.4 Non regulatory measure:Promotion of forthcoming ISO/CEN water reuse standards as a common reference for the management of health and environmental risks to be used by the Member States - **Benefits/Costs (in monetary terms)** (maximum 1000 characters)	Cons: See above. Also, if policies include references to ISO-CEN standards then it is obligatory to pay a fee for using it. This might prove to be quite costly
3.3.5 Non regulatory measure: Awareness raising and dissemination of information on the various benefits of water reuse, among all key stakeholders - **Pros and Cons** (maximum 1500 characters)	Pros: possibly change the perception by the public. Further action, where relevant, will come from the public/industry/farmers themselves. More communication on water saving opportunities (including rain water collection systems in private gardens) is likely to be a cost-effective and efficient option to reduce water consumption. Cons: Actions will probably take some time to evolve.
3.3.5 Non regulatory measure: Awareness raising and dissemination of information on the various benefits of water reuse, among all key stakeholders **- Benefits/Costs (in monetary terms)** (maximum 1000 characters)	Benefits: Costs:
3.3.6 Non regulatory measure: Develop non-binding EU guidelines on implementation of the Water Framework Directive and Urban Waste Water Treatment Directive (e.g.: clarify provisions of the Urban Waste Water Treatment Directive on water reuse; give priority to water reuse among alternative water supply options; encourage water stressed Member States to set targets for water reuse) - **Pros and Cons** (maximum 1500 characters)	Pros: Cons: setting targets for water reuse is not an effective instrument on the EU level. The necessity to reuse water should be made clear and via pricing an incentive can be given. When the necessity is clear, the barriers are solved and awareness to the possibilities are raised, the uptake should increase by itself. Targets should not be necessary, and in any way not be set by the EU (not proportional).
3.3.6 Non regulatory measure: Develop non-binding EU guidelines on implementation of the Water Framework Directive and Urban Waste Water Treatment Directive (e.g.: clarify provisions of the Urban Waste Water Treatment Directive on water reuse; give priority to water reuse among alternative water supply options; encourage water stressed Member States to set targets for water reuse) **- Benefits/Costs (in monetary terms)** (maximum 1000 characters)	Costs: Serious administrative burden without siginificant benefits, since in the Netherlands, in general we do not really have a significant problem. We prefer to have tailor made solutions since they allow for cost effective and efficient solutioons that are best fit to the problem at hand.
3.3.7 Regulatory measure: Legally binding framework to require that, in water stressed river basins, MS assess the contribution of water reuse under different water stress scenarios and, when relevant, set targets for water reuse in accordance with a clear framework for managing health and environmental risks - **Pros and Cons** (maximum 1500 characters)	Pros: Cons: setting targets for water reuse is not an efficient not (cost) effective instrument on the EU level. The necessity to reuse water depends on local circumstances and should be made clear. Reuse should not be made obligatory on the EU level. When the necessity is clear, the barriers are solved and awareness to the possibilities are raised, the uptake should increase by itself. Targets should not be necessary, and in any way not be set by/at the EU (this is definitely not proportional). Implementing a legally binding framework for the EU as a whole, will result in a serious administative burden (and costs) for a large part of the EU, especially those Member States that do not have a serious water scarcity problem.
3.3.7 Regulatory measure: Legally binding framework to require that, in water stressed river basins, MS assess the contribution of water reuse under different water stress scenarios and, when relevant, set targets for water reuse in	Costs: As stateds above, setting targets for water reuse is not an efficient not (cost) effective instrument on the EU level. The necessity to reuse water depends on local circumstances and should be made clear. Reuse should

accordance with a clear framework for managing health and environmental risks **-Benefits/Costs (in monetary terms)** (maximum 1000 characters)	not be made obligatory on the EU level. When the necessity is clear, the barriers are solved and awareness to the possibilities are raised, the uptake should increase by itself. Targets should not be necessary, and in any way not be set by/at the EU (this is definitely not proportional). Implementing a legally binding framework for the EU as a whole, will result in a serious administative burden (and costs) for a large part of the EU, especially those Member States that do not have a serious water scarcity problem.	
3.3.8 Regulatory measure: Legally binding minimum standards on water reuse at EU level addressing health and environmental risks **- Pros and Cons** (maximum 1500 characters) *In the present context, the term 'standard' refers to different types of documents that provide requirements, specifications, guidelines or characteristics (e.g. water quality, reuse practices, etc...) to ensure that water reuse projects achieve an acceptable level of health and/or environmental protection*	Pros: This can be a helpful way to increase export possibilities for example for crops irrigated with reused water. It should in any case be coordinated with other international standards such as WHO and US SEPA. It should in any case not decrease the export possibilities. The above applies to minimum **quality** standards. The Netherlands is a wet country. Therefore, most of the time we are able to meet water demands by the available surface water and we will not need to use reused water. Therefore, minimum requirements on **quantity of water to be reused** are not cost effective nor efficient. Cons: could be counterproductive if not coordinated with other international standards. As stateds above, setting targets for water reuse is not an efficient not (cost) effective instrument on the EU level. The necessity to reuse water depends on local circumstances and should be made clear. Reuse should not be made obligatory on the EU level. When the necessity is clear, the barriers are solved and awareness to the possibilities are raised, the uptake should increase by itself. Targets should not be necessary, and in any way not be set by/at the EU (this is definitely not proportional). Implementing a legally binding framework for the EU as a whole, will result in a serious administative burden (and costs) for a large part of the EU, especially those Member States that do not have a serious water scarcity problem.	
3.3.8 Regulatory measure: Legally binding minimum standards on water reuse at EU level addressing health and environmental risks - **Benefits/Costs (in monetary terms)** (maximum 1000 characters) *In the present context, the term 'standard' refers to different types of documents that provide requirements, specifications, guidelines or characteristics (e.g. water quality, reuse practices, etc...) to ensure that water reuse projects achieve an acceptable level of health and/or environmental protection*	See above As stateds above, setting targets for water reuse is not an efficient not (cost) effective instrument on the EU level. The necessity to reuse water depends on local circumstances and should be made clear. Reuse should not be made obligatory on the EU level. When the necessity is clear, the barriers are solved and awareness to the possibilities are raised, the uptake should increase by itself. Targets should not be necessary, and in any way not be set by/at the EU (this is definitely not proportional). Implementing a legally binding framework for the EU as a whole, will result in a serious administative burden (and costs) for a large part of the EU, especially those Member States that do not have a serious water scarcity problem.	
3.4. According to you what should be the main focus of a potential EU-level measure on water reuse? High/ Medium/ Low/ Don't know	Promoting water reuse **where relevant**	High
	Safety of water reuse applications	High
If you have any additional comments, please provide them in the box below: (maximum 1000 characters)	**We would like to stress that water reuse may be a very important option for Member States that are suffering from water stressed situations. But we would like to focus on tailor made solutions, not a**	

	one size fits all approach. Even in a water abundant country such as the Netherlands, on certain moments and in certain areas, we occasionally have some problems with water scarcity. It most often is a debate on the question to what water use do we want to deliver our scarce resource; nature protection area, agriculture, etc? Those problems are most often of a local and temporal nature, and are best (most costeffective and efficiently) solved using tailor made solutions. Water reuse of treated effluents is a technique that might become more relevant in the future, due to climate change. The consultation does not consider this time element (what is not relevant at the moment, might become relevant in 30 years.