Public consultation on policy options to optimise water reuse in the EU

1. Information about you	
1.1 Your full name and your email address: -open reply-(optional)	Laura Grant lgrant@ciwem.org
Do you wish your contribution to be made public? -single choice reply-(compulsory)	Yes
1.2 You are replying as a(n): -single choice reply-(compulsory)	Stakeholder/expert
You are representing: -single choice reply-(compulsory)	Academic/scientist/research
If responding on behalf of a(n) organisation/association/authority/company/body, please provide the name: -open reply-(optional)	Chartered Institution of Water and Environmental Management
If responding on behalf of a(n) organisation/association/authority/company/body, please provide its main sector(s) / field(s) of activity: -multiple choices reply-(optional)	Sanitation - Drinking water - Environment / Climate
1.3 Your country/ies: -single choice reply-(compulsory)	UK - United Kingdom
1.4 Do you live in an urbanised or a rural area? -single choice reply-(optional)	Don't know/Not applicable
1.5 Are you aware of water reuse practice in your neighbourhood? -single choice reply-(optional)	Yes
Please specify: -open reply-(optional)	Existing: Chelmer Recycling Scheme in Essex, Thames Valley Basin indirect reuse Planned: water company proposed large scale reuse schemes via published statutory Water Resources Management Plans
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.	Yes, both drought and water scarcity

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. -single choice reply-(optional)	
1.7 What do you think is the more important reason for water scarcity in your region? -multiple choices reply-(optional)	Human activities
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): -multiple choices reply-(compulsory)	Irrigation of urban green spaces - Irrigation of fruits and vegetables to be processed - Food industry - Street cleaning - Irrigation of cotton and other crops used for clothing products - Fire fighting - Irrigation of non-food crops (e.g. animal feed crops, energy crops, etc.) and tree plantations - Cooling (in energy production / industry) - Irrigation of golf courses and other sport fields - Groundwater recharge - Other industry - Bathing waters - Food industry with food contact - Other - Irrigation of fruits and vegetables to be eaten raw - Food industry with no food contact
Please specify: -open reply-(compulsory)	It is important to differentiate more as to the form of reuse. For example, much of the reuse in Spain is irrigation drainage water that gets re-abstracted downstream. We have reuse in UK with Oxford's treated effluent being pumped out to supply water for London etc. Thus the comparison of reuse data can be quite misleading. There is also reuse for industry, for power station cooling, and irrigation. In one instance, water reuse was a strong candidate for watering some polo grounds but the local sewage treatment works had been closed so it was not economic. In some southern European countries such as Spain reuse for irrigation is important but the need is for water of a certain quality, which would be achieved if Water Framework Directive (WFD) assessment indicate good status. It is therefore important to consider WFD assessments where effluent is discharged to a river for reuse downstream of the discharge point.
Reduced water scarcity -single choice reply-(compulsory)	High
Reduced pollution discharge from urban waste water treatment plants into rivers -single choice reply-(compulsory)	Low
Improved resilience/adaptation to climate change -single choice reply-(compulsory)	Medium
Energy and carbon savings -single choice reply-(compulsory)	I don't consider this as a potential benefit
Increased resource efficiency (nutrients recycling) -single choice reply-(compulsory)	Low
Contribution to soil fertilisation -single choice reply-(compulsory)	Low

Cost savings for public authorities -single choice reply-(compulsory)	Low
Cost savings for water users -single choice reply-(compulsory)	Low
Increased revenues for the agricultural sector (due to higher water availability and productivity) -single choice reply-(compulsory)	Low
Increased revenues for the tourism sector (due to higher water availability) -single choice reply-(compulsory)	Low
Innovation potential in the water industry -single choice reply-(compulsory)	Medium
Job creation -single choice reply-(compulsory)	I don’t know
If you identify other important benefits, please specify them: -open reply-(optional)	In water resources availability assessments, water reuse can enhance the deployable output or yield of water resource systems. For supply demand balance options appraisal, water reuse schemes can form part of a balanced twin track approach to water resources management, considering social, financial and environmental impacts and customer levels of service
Too high cost of reused water -single choice reply-(compulsory)	Medium
Too low price of freshwater water -single choice reply-(compulsory)	Medium
Insufficient control on (freshwater) water abstractions -single choice reply-(compulsory)	I don't consider this as a barrier
Lack of awareness on the multiple benefits of water reuse -single choice reply-(compulsory)	Medium
Water reuse not seen as a component of integrated water management (e.g. in scarce areas no incentives to water reuse in place) -single choice reply-(compulsory)	Low
Fear of potential trade barriers for food products -single choice reply-(compulsory)	I don’t know
Negative public perception on the quality of reused water -single choice reply-(compulsory)	Low
Lack of clarity in the regulatory framework to manage risks associated with water reuse -single choice reply-(compulsory)	Low
Too stringent national water reuse standards -single choice reply-(compulsory)	I don't consider this as a barrier
Technical barriers and scientific uncertainties -single choice reply-(compulsory)	Medium
If you identify other important barriers, please specify	The categorisation of water reuse schemes is often confused. Large scale water reuse schemes be split into planned and unplanned and direct and indirect. At

them: -open reply-(optional)	present, there is no coherent governance policy on guidelines for water reuse and related quality standards for the protection of public health and the environment. Reducing carbon footprints and improving energy efficiency of existing schemes should underpin any coherent water reuse policy. The background documentation refers to six (6) barriers to the greater uptake of water reuse scheme. I agree fully with the inclusion of inadequate water pricing as one of the major barriers. A failure to appropriately account for the true value of water and the opportunity costs and externalities associated with its use continue to act to incentivise traditional infrastructure solutions to water management problems. Standard methods of accounting for opportunity costs and externalities need to be encouraged or legislated to enable objective comparison of options. In addition, stakeholder (customer) perception and education is an important issues in the UK. Furthermore, the following areas require further understanding and consensus across different water use and water user categories: substance persistence, role of dilution in WFD compliance, risk levels from linear and recirculating reuse systems, energy requirements, baseline information on existing unplanned reuse, dilution factors to prevent build-up of contaminants in “closed” systems.
3. Your opinion on possible EU measures	
1. Maintaining status quo: No new EU measure -single choice reply-(compulsory)	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 -single choice reply-(compulsory)	Very effective
3.1 Non regulatory measure: Develop non-binding EU guidelines on how to foster water reuse -single choice reply-(compulsory)	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 -single choice reply-(compulsory)	Effective
3.3 Non regulatory measure: Awareness raising and dissemination of information on the various benefits of water reuse, among all key stakeholders/consumers -single choice reply-(compulsory)	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) -single choice reply-(compulsory)	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	Effective

-single choice reply-(compulsory)	
4.2 Regulatory measure: Legally binding minimum standards on water reuse at EU level -single choice reply-(compulsory)	Effective
If you think other EU measures would be relevant in order to promote water reuse, please specify them: -open reply-(optional)	We note that the EU recently funded the establishment of a water reuse association to bring together interested parties. In addition, the development and publication of a coherent water quality would help promote water reuse schemes for addressing the supply demand balance issues linked to water scarcity.
Do you consider that a combination of different measures would be necessary to **promote water reuse**? -single choice reply-(compulsory)	Yes
Please specify which measures should be combined: -open reply-(compulsory)	Regulatory and non-regulatory measures should be combined for cost effectiveness. For effectiveness, a coherent communications and stakeholder engagement strategy should be developed. The strategy should recognise standards, best practice and the degree of compliance with existing measures through implementation of the Water Framework Directive and the Urban Waste Water Treatment Directive
1. Maintaining status quo: No new EU measure -single choice reply-(compulsory)	Slightly effective
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 -single choice reply-(compulsory)	Effective
3. Regulatory measure: Legally binding minimum standards on water reuse at the EU level addressing health and environmental risks -single choice reply-(compulsory)	Effective
If you think other EU policy measures would be relevant in order to ensure the safety of water reuse practices, please specify them: -open reply-(optional)	We agree with the listed measures but would emphasise the need for better communication of standards and best practice.
Do you consider that a combination of different measures would be necessary to ensure **the safety of water reuse practices**? -single choice reply-(compulsory)	Yes
Please specify which measures should be combined: -open reply-(optional)	A combination of best practice guidelines, potable and non-potable quality standards and stakeholder engagement.
3.3.1 Maintaining status quo: no EU measure - **Pros and Cons** -open reply-(optional)	
3.3.1 Maintaining status quo: no EU measure - **Benefits/Costs (in monetary terms)** -open reply-(optional)	
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** -open reply-(optional)	
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)** -open reply-(optional)	
3.3.3 Non regulatory measure: Develop non-binding EU guidelines on how to foster water reuse - **Pros and Cons** -open reply-(optional)	
3.3.3 Non regulatory measure: Develop non-binding EU guidelines on how to foster water reuse -**Benefits/Costs (in monetary terms)** -open reply-(optional)	
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** -open reply-(optional)	
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)** -open reply-(optional)	
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** -open reply-(optional)	
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)** -open reply-(optional)	
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** -open reply-(optional)	
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)** -open reply-(optional)	
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** -open reply-(optional)	
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 - **Benefits/Costs (in monetary terms)** -open reply-(optional)	
3.3.8 Regulatory measure: Legally binding minimum standards on water reuse at EU level addressing health and environmental risks - **Pros and Cons** -open reply-(optional)	
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)** -open reply-(optional)	
Promoting water reuse where relevant -single choice reply-(compulsory)	Medium
Safety of water reuse applications -single choice reply-(compulsory)	High
If you have any additional comments, please provide them in the box below: -open reply-(optional)	