



Topic 6

Each groundwater use has its own quality requirements. What solutions and accompanying measures to reconcile groundwater quality and local development?

Citizens -who are also **consumers**- want the groundwater they withdraw as individuals or receive through networks to be free from sanitary risks. They are concerned by environmental impacts of human activities on the quality of groundwater resources and the least they expect is to receive relevant information on groundwater quality.

Economic operators in both the agricultural and industrial sectors are expected to limit groundwater pollution. However, they also require good quality groundwater in sufficient quantity, and at an acceptable cost.

To meet these expectations, **local communities** require a relevant regulatory framework to protect their groundwater resources. At the local scale, the challenge is to reconcile groundwater protection and territorial development.

Among possible technical solutions, resorting to complementary non-conventional resources or transfer surface water from other watersheds could be a way to face water quality problems and reduce overexploitation of groundwater. However, the **operators of the production systems**, of water distribution, and of waste water processing expect a strict legal and statutory framework which will allow them to exploit groundwater, and if necessary, to re-use treated waste water in good technical, economic and legal conditions. Appropriate regulation and effective control of drilling should enable them to invest in the long-term and to manage public assets in a sustainable way.

This session will be dedicated to contractual and local solutions and to accompanying measures that are already implemented are based on agreements between the operators, communities and users to reconcile groundwater quality requirements and local development. The session will cover two different contexts: those in developed countries where the precautionary principle often leads to very restrictive regulations, which are difficult to apply, and developing countries, where qualitative and quantitative issues overlap. The question of bearable -or "proportionate"- costs will also be a major issue in the debate.

Papers should provide evidence, case studies or ex-post evaluations of initiatives, and an analysis of the conditions governing their success through the implementation of accompanying technically and economically relevant measures.