

## List of Challenges - Innovation for Change - Turin 2016

Challenge Owner	Challenge	A short explanation
<b>UNIDO</b>	1. N <sub>2</sub> O Emissions (Air 1)	<p>Reduce emission of greenhouse gas through the reduction of the global anthropogenic nitrous oxide (N<sub>2</sub>O) emission into the atmosphere.</p> <p>How to estimate agricultural N<sub>2</sub>O sources in order to plan activities and possible interventions to overcome the challenges of projecting and mitigating N<sub>2</sub>O emissions?</p>
<b>SMAT</b>	2. Urban water leakage (Water 1)	<p>One of the main challenges that is being faced by Water Industry is the huge quantity of drinking water that is lost along water distribution networks. In these contexts strategies, actions and innovative technologies aimed at the reduction and fast repair of water leakages is of great relevance.</p>
<b>ENEL</b>	3. Wind forecasting (Air 2)	<p>Improving the efficiency of forecasting wind and wind energy production to improve the business value of windfarms.</p>
	4. Water for industrial use (Water 2)	<p>Pre-treatment of water with a high salt content for industrial use . (eg. Reverse osmosis membranes at low cost or increase service life)</p>
<b>Barilla</b>	5. Nitrogen cycle (Air 3)	<p>How can we fix nitrogen from the atmosphere directly into the field by a self-regulated system?</p>
<b>MISE</b>	6. Water shortage in urban areas (Water 3)	<p>Low cost/ scalable solutions to counteract the eminent large scale water shortage that will be faced by most of the urban areas worldwide within the next decades – example of technologies – desalination, rain harvesting, condensation, recycling, etc.</p>
	7. Reducing CO <sub>2</sub> impact (Air 4)	<p>How to reduce the CO<sub>2</sub> impact/emissions in a city by engaging local urban and industrial communities. (eg: Reducing emissions by energy efficiency from heating &amp; cooling)</p>
<b>Aquasis-solutions*</b>	8. Improving efficiency of water use in Agriculture (Water 4)	<p>A solution for measuring groundwater recharge and efficiently using the obtained water in North African fields.</p>