IBM's Smart Water Grid Plans

The jibber-jabber about smart grids centers mainly on electricity, but water also needs thorough, intelligent, management. To this end, IBM is getting in the water game, which it thinks can become a $20 billion business.

As part of its Big Green ventures, the company will design back end software that monitors water-works like pipes, resevoirs, rivers and harbors.

The company is also developing desalination technology, which converts non-potable water into potable water.

WSJ: In a related development, IBM researchers said they have created a new desalination-membrane technology that goes beyond current systems and removes arsenic and boron salts from contaminated ground water, making it safe for humans. Desalination membranes filter out salts, allowing clean water to pass through.

Robert Allen, a chemist at IBM's Almaden, Calif., lab said that his team found a way to put a polymer designed for immersive lithography -- a technique for making semiconductors -- into membranes that reject the toxic salts. He said arsenic contamination is a problem in some water supplies in Texas, Turkey, Bangladesh and China. IBM expects to license the technology rather than make desalination plants itself.

Water shortages are a looming issue, so this is a smart move by the company. Earlier this year in a note, Merrill Lynch cleantech strategist Steven Milunovich wrote, "Water expert Peter Gleick made an interesting argument that, while water is a renewable resource, we are reaching peak ecological water. This threatens water availability for industry use, such as solar thermal in cleantech. It also suggests future investment opportunities in a sector where it's hard to find companies right now. "