

## Stantec Confirms That Environmental Services Have a Key Role to Play in Hydrogen Projects

Stantec executives discuss the environmental impacts and water requirements of hydrogen production.

t Site specific properties that may further impact cooling water demand

By Stantec's calculations, that is equivalent to about 12 billion m<sup>3</sup>/year (3.2-trillion gal/year) by 2050 which is a small percentage of the global overall water demand. The bigger concern is that the hydrogen production ecosystem (including hydrogen production as well as localized supply chain development) could be concentrated in specific areas and the local supply of water could be disproportionately stressed-if appropriate evaluation is not conducted.

We are supporting clients to secure the water from traditional sources as well as non-traditional sources depending on the site location. Non-traditional water resources (such as municipal or industrial wastewater) may require additional purification steps for the water but could have greater water supply security. Water-treatment for hydrogen production is well understood and can be done with existing treatment technologies.

CCBJ: What other environmental impacts could water sourcing create?

Snelling & Basu: If the water sourcing strategy is not done thoughtfully, it may lead to depletion of the water source, perhaps even irreversibly, and the associated long term effects. It could impact the operator's reputation as a good corporate citizen within the community in which it operates.