

From: [REDACTED] <[REDACTED]>

Sent: Friday, 8 July 2022 11:18 AM

To: [REDACTED] <[REDACTED]>

Cc: [REDACTED] <[REDACTED]>; [REDACTED]
<[REDACTED]>

Subject: RE: Congratulations

Hello [REDACTED], [REDACTED]

The strategy looks great, and I commend your effort on this!

I have some forward-looking feedback for you from a European point of view. In Europe and the US, groundwater is increasingly being used for heating and cooling (buildings, industrial processes, etc). One prominent application is aquifer thermal energy storage (ATES). Here's a review from the institution that I worked at: <https://doi.org/10.1016/j.rser.2018.06.057>. ATES is almost non-existent in Australia, but I forecast that this will come because ATES systems have best efficiency when you cool and heat.

The current issue in Europe is a regulatory void/chaos regarding temperature and thermal impacts on groundwater quality and GDE. The latter has become a new research focus in Europe.

The NSW groundwater strategy may want to consider this, as the energy transition towards renewables will undoubtedly bring this into play in Australia.

I have registered for your session and may have some more feedback another time. In the meantime, please do celebrate this progress.

Cheers,

[REDACTED]