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Reading Notebook

In this article it talks about how the fast happening growth of AI data centres in Ireland, especially around Dublin is affecting local communities and the environment. These data centres use large amounts of electricity and water which is raising concerns about energy use, environmental changes and higher costs for households. Some people who live near the centeres are concerned about the cost rising of electricity, environmental changes and the impact the facilities have on their communities. The article also uses Ireland as a warning for Australia, which is experiencing its own growth in data centre development and needs to make sure energy infrastructure and renewable energy can keep up.

Key Terms:

- Data centre - A large building filled where computer servers are used to store and process information. These buildings uses a big amount of electricity and water to operate and cool the servers.
- AI (Artificial Intelligence) - Technology that allows computers to complete task that requires humans to think like processing information, generating responses, and recognizing patterns.

Discussion points :

- I thought it was interesting that electricity and water is used to keep data centres running . The physical data centres behind AI require enormous amounts of electricity and water. The article states that global data centres used 448 trillion watt-hours of electricity in 2025.

- I thought it was interesting that data centres can be built much faster than the energy infrastructure needed to support them. This could create problems if

technology grows faster than the systems needed to provide enough electricity and renewable energy.

Quote:

“Ireland does provide a useful warning about what can happen when electricity demand from data centres grows faster than the generation, storage and network infrastructure.” page 12

Muddiest Point:

- I was a little confused about exactly how data centres cause electricity prices for households to increase.
- I also thought about how data centres can realistically use enough renewable energy to meet their needs. TIt was exlained that renewable energy requirements exist but there are still concerns about whether the amount of renewable energy available can keep up with the growing demand.