## THE FLAVIAN SUPERHYBRID<sup>TM</sup> PROJECT

Introducing Sunshine Hydro's Miriam Vale pumped hydro renewable energy project

### Your invited to meet the team – Miriam Vale 16 and 17 August

### Green, reliable renewable energy

Sunshine Hydro is proposing a pumped hydroelectricity project near Miriam Vale, off Forestry Road, Colosseum.

Through our advanced 'Superhybrid<sup>™</sup>' technologies we plan to generate reliable renewable energy to the electricity grid, along with green hydrogen production.

Planning has commenced, with the intention to lodge a Development Application with Gladstone Regional Council in 2023.

### **Commitment to local benefits**

Sunshine Hydro is committed to ensuring the Miriam Vale community benefits from this project through employment opportunities and prioritising local contractors and suppliers.

We are also keen to hear ideas about how the project can create broader benefits and opportunities within Miriam Vale and the region.

#### **Community information 'drop in' sessions**

We welcome you to meet the Sunshine Hydro project team and find out more about our proposal.

The drop-in sessions will allow interested residents to discuss the project with our team and ask any questions.



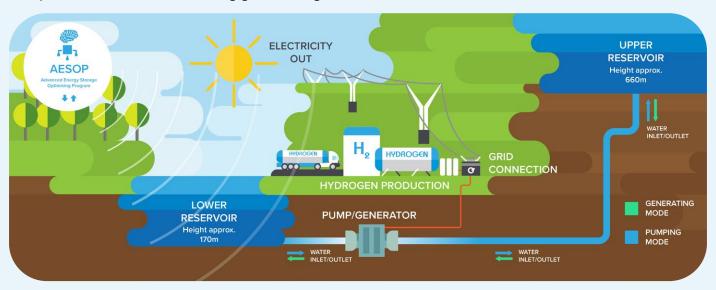
Location	Date	Time
Miriam Vale Community Centre 41 Blomfield St, Miriam Vale	Tuesday 16 August 2022	Between 5pm - 6.30pm
	Wednesday 17 August 2022	Between 7am - 8.30am

You can drop in to meet the team or register your intended attendance at: flavian@sunshinehydro.com.au

### How pumped hydro works

Hydropower is generated by releasing water from an upper reservoir through hydroelectricity turbines into a lower water reservoir. The water is then pumped from the lower reservoir to the top reservoir commencing the process again and creating a continuous loop of energy production. This renewable energy can be sent to the electricity grid. We also have plans to generate green hydrogen, an important form of transportable renewable energy. This will also assist with the decarbonisation of our economy and industry.

This process is outlined in following general diagram:



### The Sunshine Hydro proposal is in the early scoping and planning phase.

We have commenced scoping and planning to prepare a future Development Application. We have also recently completed negotiations to secure sufficient land, with ideal terrain to host a 'pumped hydro' project, with upper and lower reservoirs.

As part of the development application we will complete a number of key studies including:

- Water and energy access
- Site access and traffic management
- · Infrastructure requirements
- Environmental values, including flora, fauna and hydrology
- · Cultural heritage
- · Noise and acoustic outcomes
- · Visual amenity
- Workforce requirements and accommodation
- Geotechnical
- · Social and economic outcomes.

As we progress these studies, we welcome feedback from locals about these and other topics. These studies will inform a comprehensive Development Application to be lodged with Gladstone Regional Council, planned for 2023. Information about these studies will be available further in the planning process.

### **Project timeframes**

Sunshine Hydro is planning to submit a Development Application in 2023. We are targeting development approvals in 2024-25, with construction from 2026.



Please register for project updates at: flavian@sunshinehydro.com.au

Please visit our website for more information and updates: **www.flavian.sunshinehydro.com** 

**Electricity** transmission system

**Proposed water** pipeline from the Agnes Water desalination plant

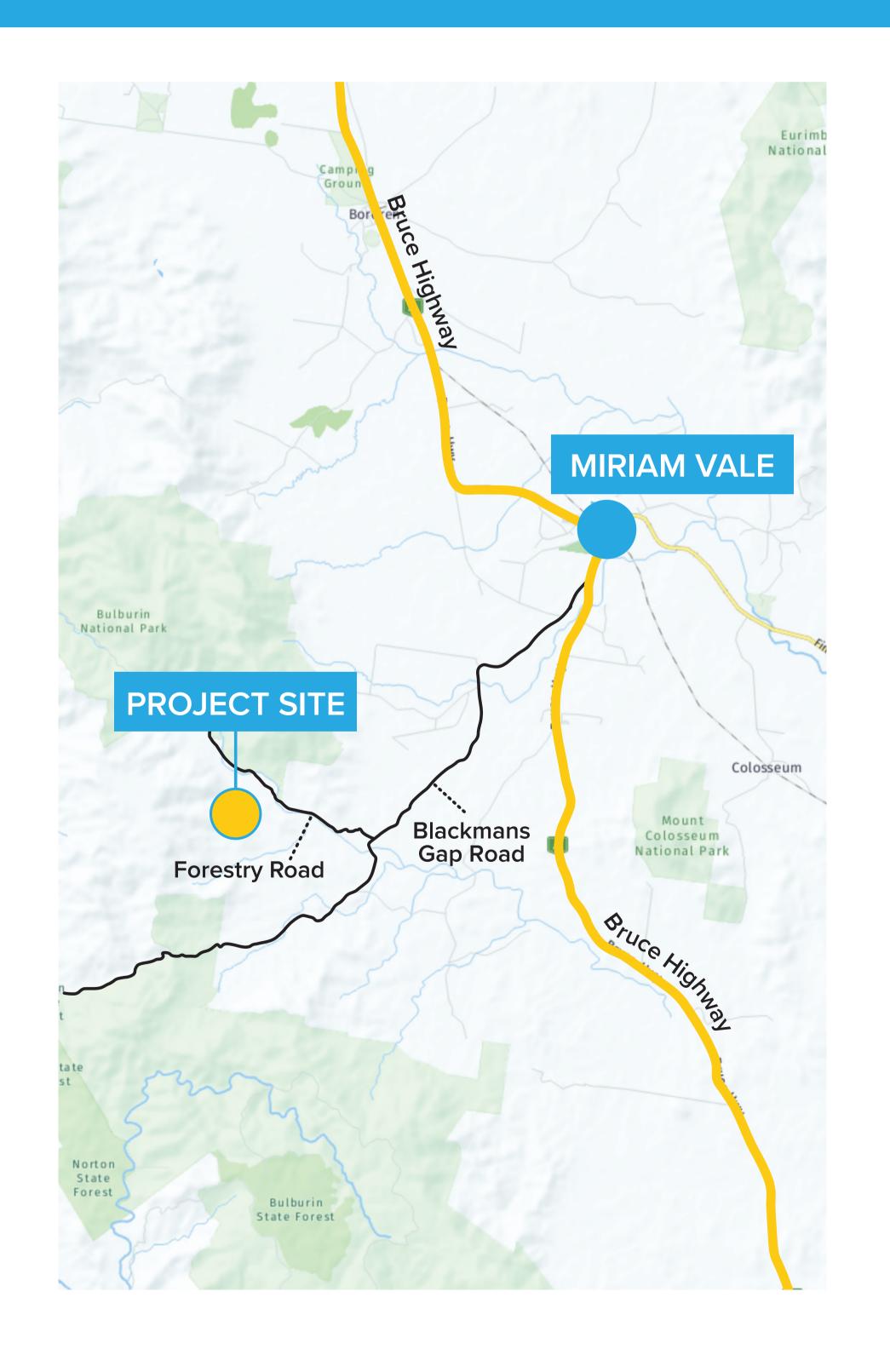


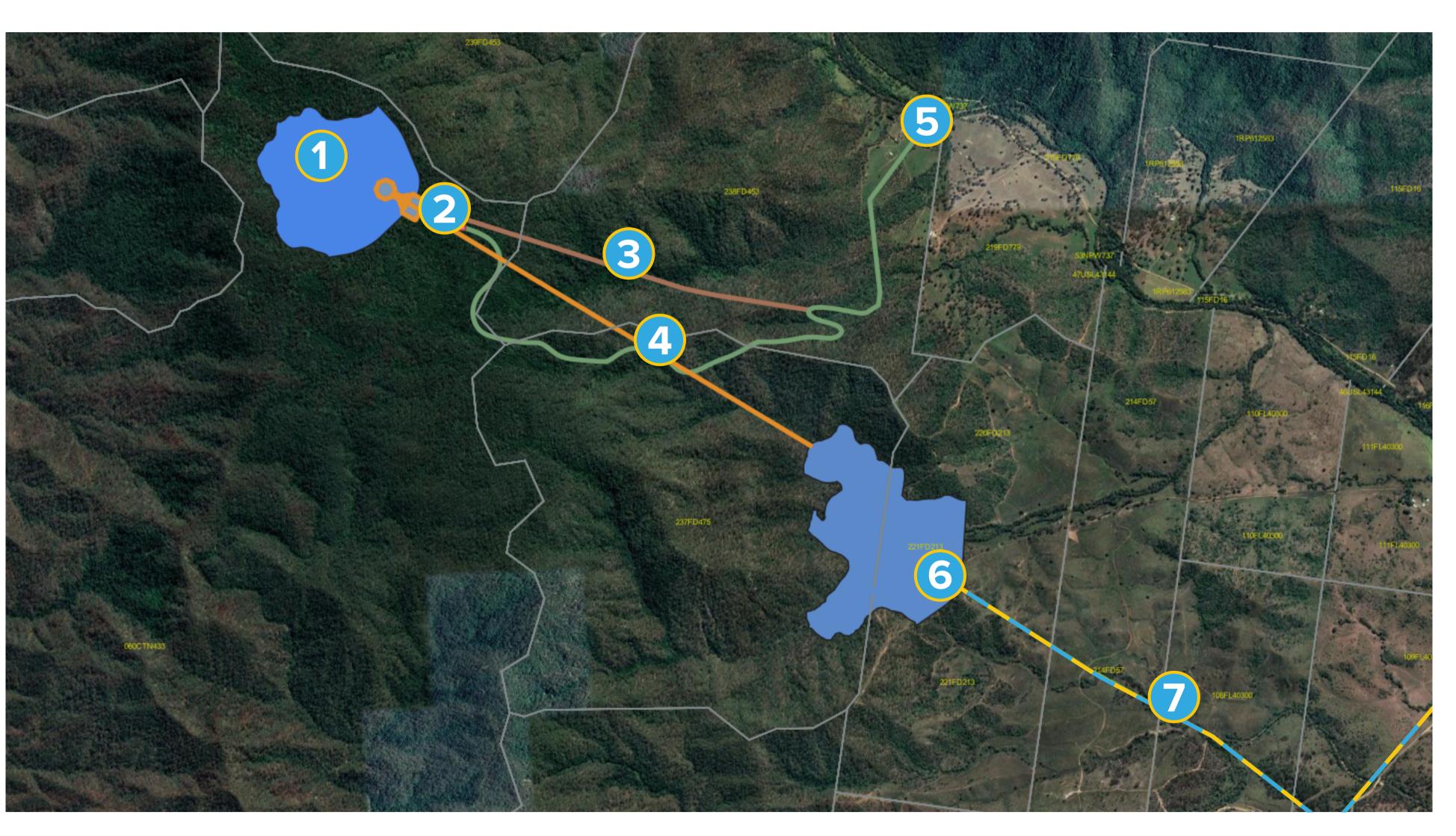
Flavian pumped hydro project site





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Upper water storage approximately 10GL and 660 AHD



Hydro turbines with 900MW capacity



Inspection and service chamber access



Hydro pipe connection between upper and lower storage



Forestry Road and access road to site



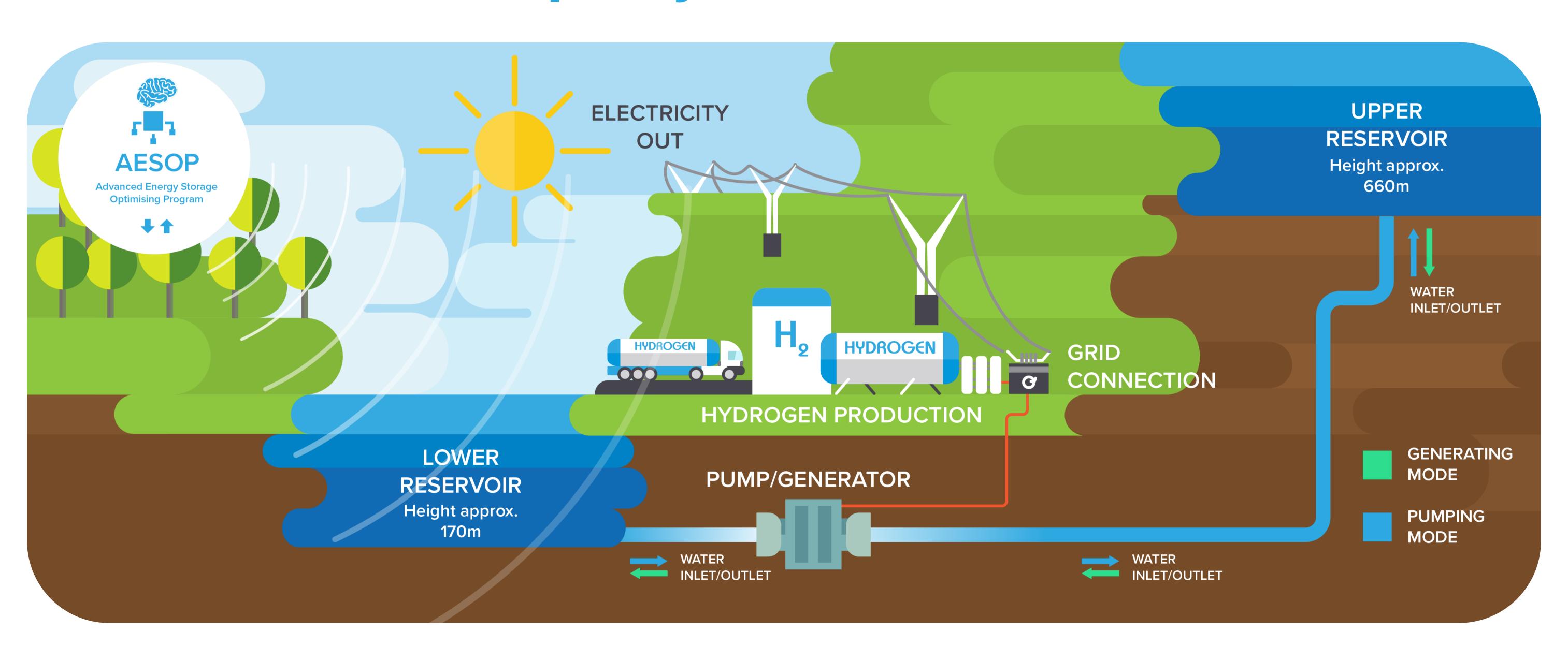
Lower water storage approximately 13GL and 170m AHD



Potential water pipeline connection to lower water storage

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### Pumped hydro – How it works



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### Development Applications studies



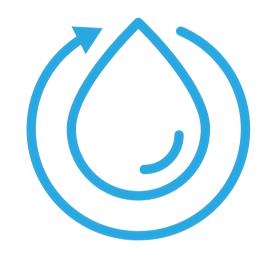
Water and energy access



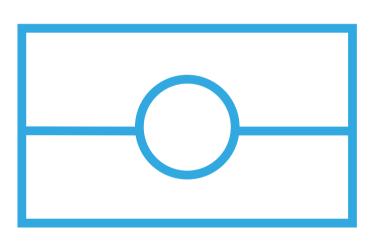
Site access and traffic management



**Environmental** studies



Hydrology



**Cultural** heritage



Noise and acoustic outcomes



Visual amenity



Workforce requirements and accommodation



Social and economic outcomes



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