Fostering Climate Change Outcomes

The Parkes Water Infrastructure Renewal Project

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Gea | PARKES SHIRE COUNCIL

Most people will talk the talk,
few will walk the walk;
be amongst those few.

— Dr. Steve Maraboli


Photo: Christian Uhrig

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Sewage Treatment Plant

Photo: Christian Uhrig

Water Treatment Plant

Photo: Christian Uhrig

Parkes Shire Council was willing to invest in going beyond business as usual for longer term benefits to the environment, community and operating costs of the plant.

Resilience Initiatives

3 initiatives

3 initiatives

Climate Change
Risk Assessment

Diversification of
Water Sources

Photovoltaic
Augmentation

Critical infrastructure such as sewage and water treatment plants are vulnerable to the effects of climate change.

Maximum temperatures projections

Year 2030

↑0.7°

Year 2070

↑2.1°

Climate change risk assessment steps

Key climate change risks

Adaptation measures

1 Key climate change risks

2 Adaptation measures

3 initiatives

Climate Change Risk Assessment

Diversification of Water Sources

Photovoltaic Augmentation

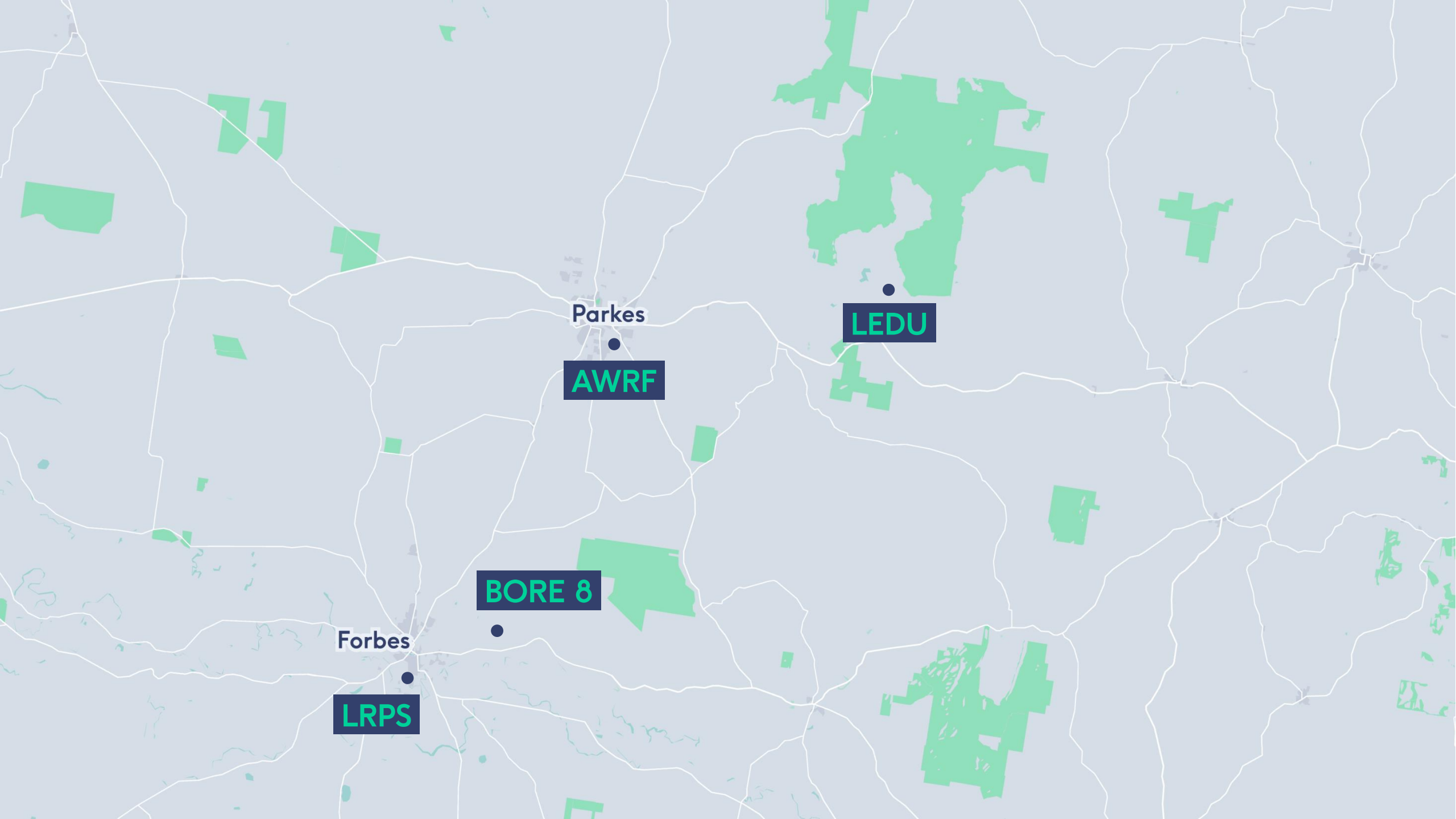
3 initiatives

Climate Change Risk Assessment

Diversification of Water Sources

Photovoltaic Augmentation


Beargamil Dam
Parkes WTP
Parkes
Lake Endeavour Dam
Orange
Forbes
Borefield
Lachlan River
Pump Station


Parkes
AWRF
LEDU
BORE 8
Forbes
LRPS

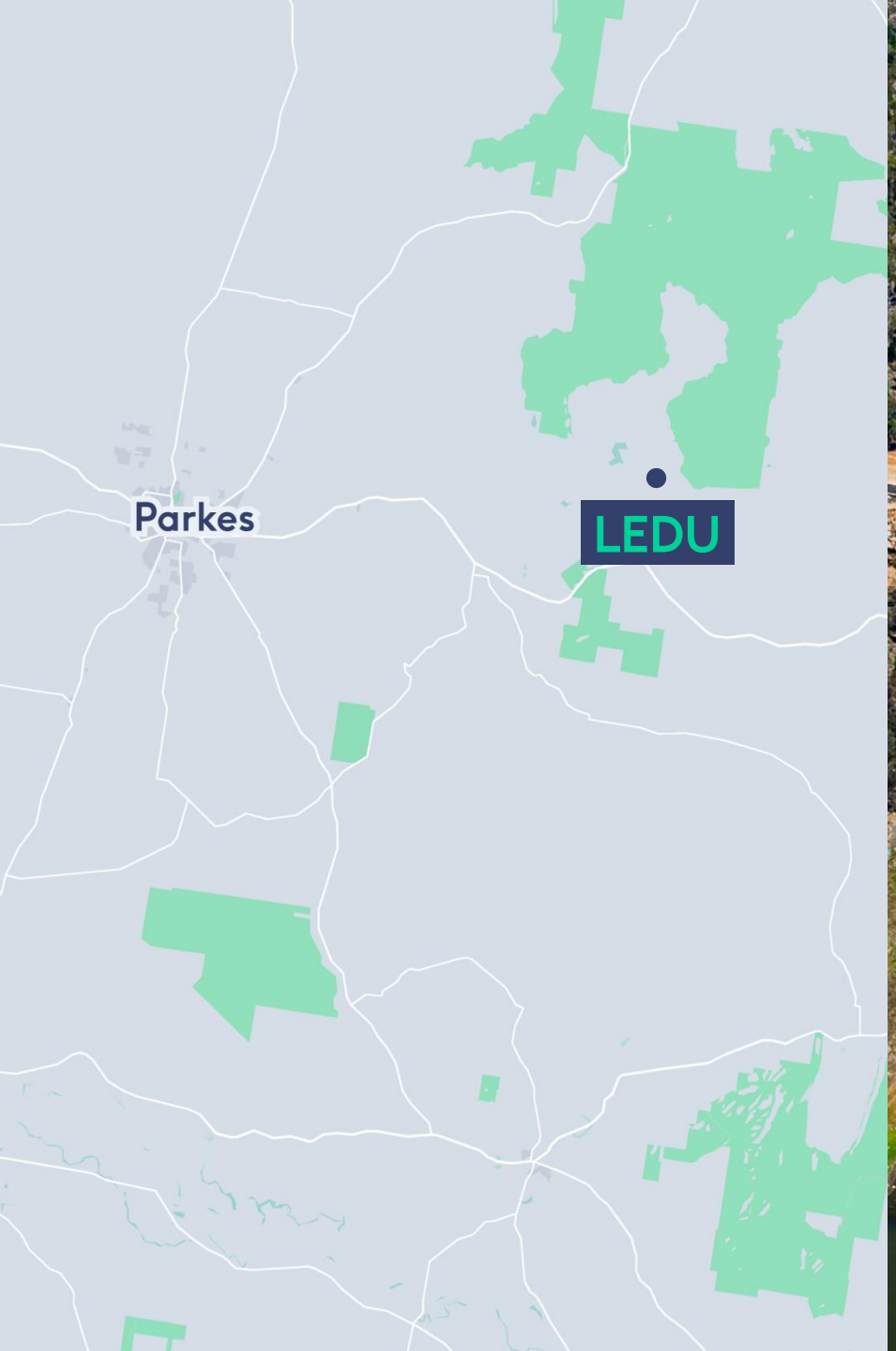

Parkes
LEDU


Photo: Christian Uhrig


Parkes
Forbes
LRPS
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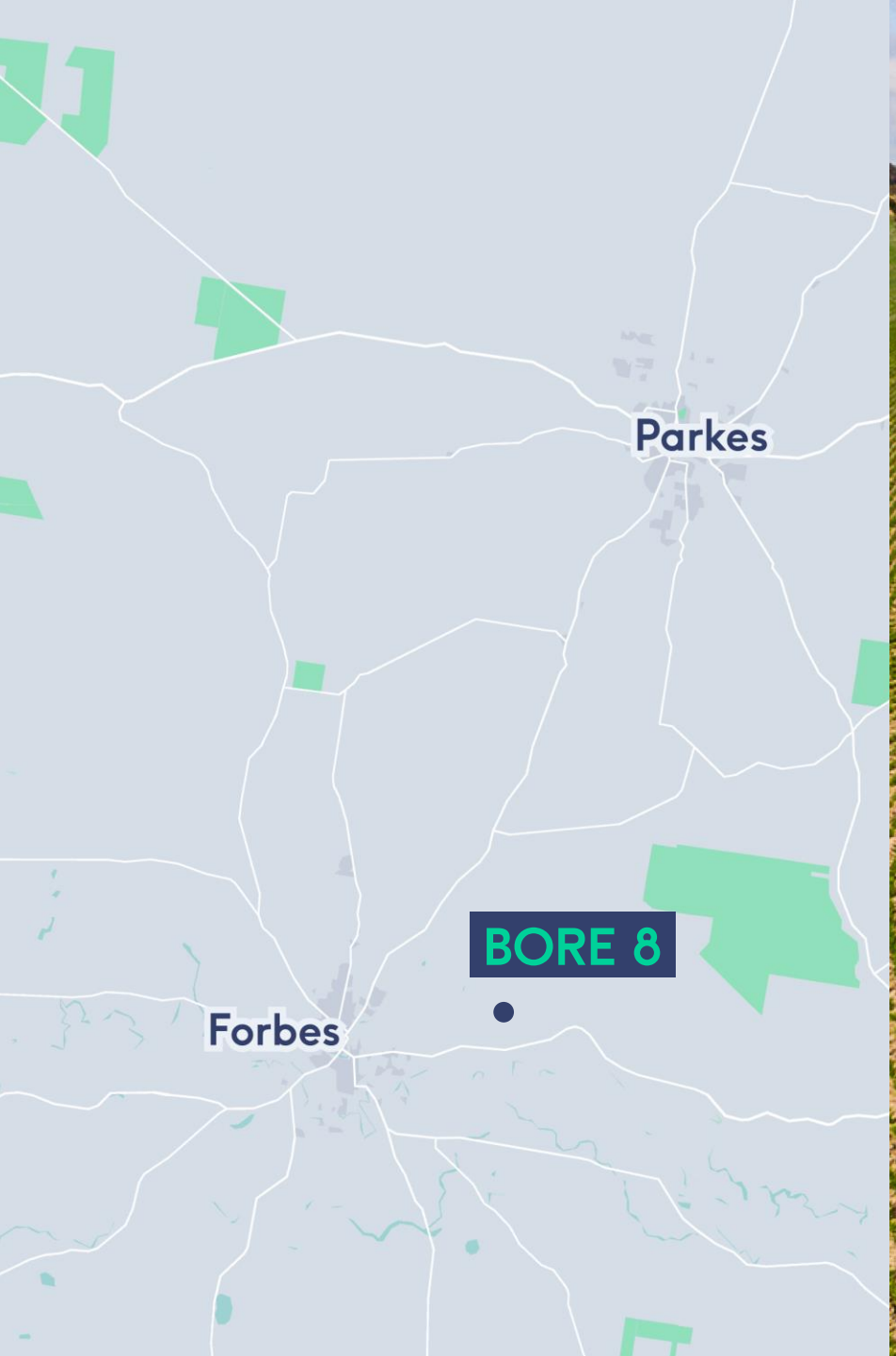
Parkes
BORE 8
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Photo: Christian Uhrig

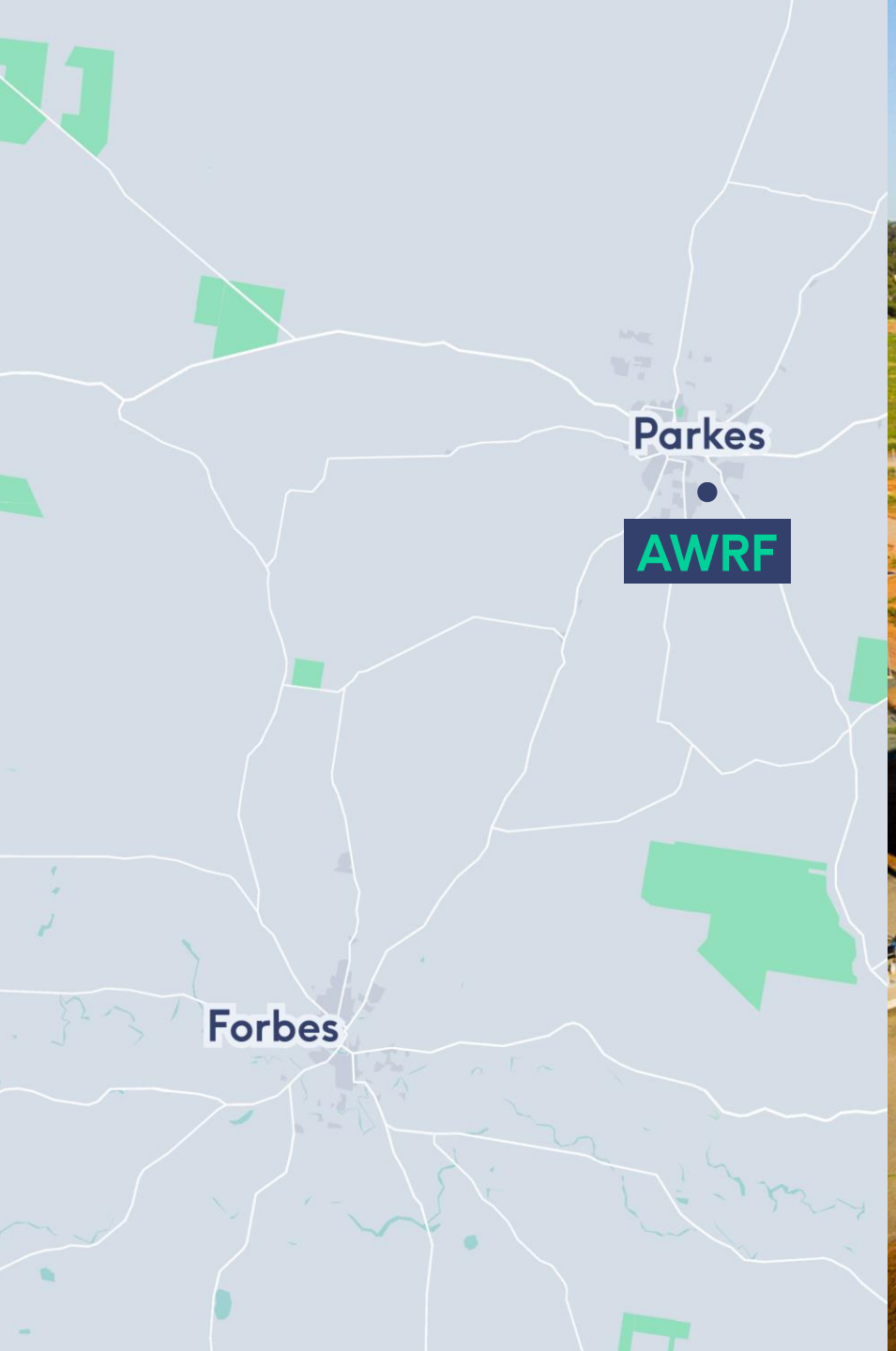
Parkes
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Photo: Christian Uhrig

3 initiatives

Climate Change Risk Assessment

Diversification of Water Sources

Photovoltaic Augmentation

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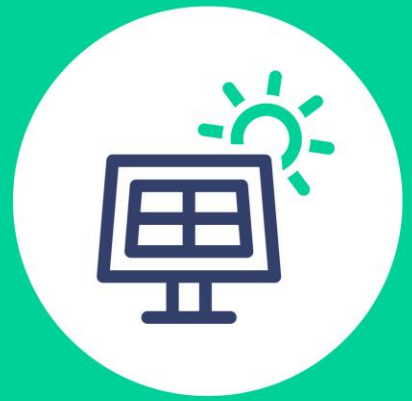
Climate Change Risk Assessment

Diversification of Water Sources



Photovoltaic Augmentation

Photo: Christian Uhrig

20%

plants energy supply per annum

8Yrs

Payback period

Modelling has been carried out based on a 100kWp system

STP: 100kWp 288kWp

WTP: 100kWp 108kWp

Further savings if maximum energy draws shifted to peak sunlight hrs

Key aspects for climate change resilience outcomes

Acknowledgements

Thank you!

Questions?

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