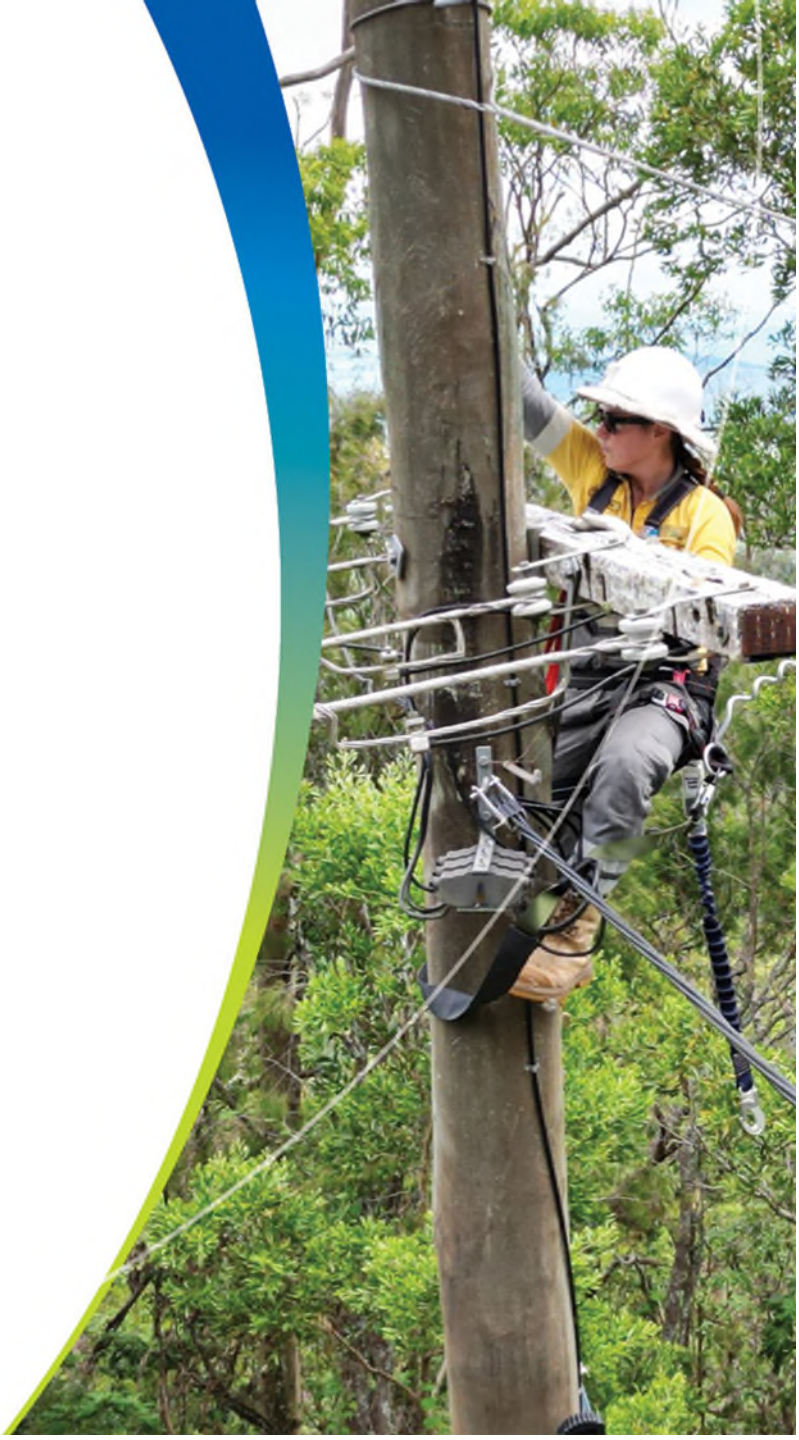
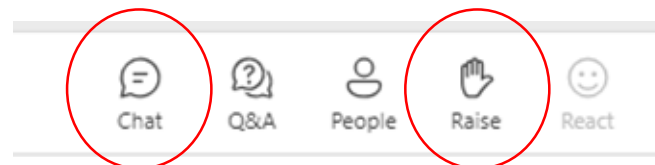


Energy Academy 2024



Energy Academy 2024 Webinar reminders

- Length – 90 minutes
- Feel free to ask questions throughout the presentation in the chat. Our Subject Matter Experts (SMEs) will reply directly to you
- This session is recorded so if you need to post **private contact information** (phone number, email address or EWR number) Let our SMEs know and they will open a private chat with you
- At the end of each presentation there will be an opportunity for questions. During this time, you can raise your hand with the Raise button and we will unmute your microphone.



Acknowledgement of Country



Energy Queensland acknowledges the First Peoples of this Nation and their ongoing cultural and spiritual connection to the land, waters and communities in which we live, work and play.

We pay respects to Elders past and present as they are the custodians of sacred stories, traditions and culture of First Nations peoples, we are grateful for their guidance, wisdom and leadership.

We also acknowledge the Country beneath our electricity network, and that it was, and always will be, traditional Aboriginal and Torres Strait Islander land and waters.

Agenda

- **Communicating with Customer Operations, Storm Reconnection, POEL and Portal Help** – Tahnee Murray and Customer Operations SMEs
- **Top 3 Reasons for Electricity Defect Report** – Craig Matthews
- **Electrical Partners Portal – Upgrade & New Look & Feel** – Todd Dove and the CMX Change Team
- **Renewables and Distributed Energy including Updating DNSP Standards for AS/NZS 4777.1:2024** – Jamie Glendenning and Alan Copeland
- **Mains Connection Box Replacement or Maintenance** – Gary McCormick
- **Compliant Customer Connections** – Tim Zemek

Customer Operations

- Improvements to Contractor Hotline
- Portal Help & Guides
- Storm Season Reminder - Reconnect After Defect Process
- EWR Categories & Secondary Selections



Improvements to Contractor Hotline

The Contractor Hotline IVR options have been recently updated to ensure your call is answered by a specialised team member, with minimal wait time:

- **Press 8** to report a power supply issue (including relays and broken seals).
- **Press 1** for Queensland Electricity Connection Manual (QECM) enquiries.

For EWR enquiries:

- **Press 2** for Solar, Battery and Electric Vehicle enquiries
- **Press 3** for New Connections including appointments for New Connections
- **Press 4** for Existing Connections including appointments for Existing Connections
- **Press 5** for all other enquiries

Portal Help & Guides

User guides and training materials can be found online on both the Ergon Energy Network and Energex Websites under Portal Help.

More information?

Our [FAQs](#) may help you with an enquiry on the portal.

Category: Contractors & installers

- Contractors & installers
- electrical partners portal

Deselect all

Am I required to register to use the portal?

As an Electrical Contractor, how do I ensure that I don't get charged for something the customer should pay for?

Can I copy a Connect Application in the portal?

Can I delete a saved EWR or connect application?

Can I edit a submitted EWR in the portal?



How to find - Ergon



Search

Portals ▾



Document library

Standard Work Procedures & technical documents

Electrical contractors

Queensland Electricity Connection Manual (QECM)

QECM query call back request

Electrical contractor updates

Energy Academy

Authorised person

Price list for Alternative Control Services

Making a claim for electrical contractor fees

EV charging & connections

Solar installers

Solar industry updates

Small IES connections

Electrical Partners Portal

Register for the Electrical Partners Portal

Portal user guides & tips

Contractor connections

Commercial & residential subdivisions

Unmetered supply & public lighting

Working with us

Contestable work

Tenders

Facilities access & shared assets

Underground facilities

Overhead fibre on poles

Wireless antennas

Public EV chargers

I want to

Login to the Electrical Partners Portal

Read the QECM and the QEMM

Ask a QECM question

Find out more on UMS and public lighting

View metering charges

Register for electrical contractor industry updates

Register for solar installer industry updates

Organise customer requested switching (isolation upstream)

Community \$10,000 this

Open for applications for not-for-profit



How to find - Energex



Queensland Electricity Connection Manual (QECM)

QECM query call back request

Electrical contractor updates

Energy Academy

Authorised person

Price list for Alternative Control Services

EV charging & connections

Solar installers

Solar industry updates

Small IES connections

DER Register

Solar feed-in tariff changes

Electrical Partners Portal

Register for the Electrical Partners Portal

Portal user guides & tips

Tenders

Facilities access & shared assets

Underground facilities

Overhead fibre on poles

Wireless antennas

Public EV chargers

CCTV, Smart Sensors & other devices

Banners, signs & artwork

Accredited Service Provider Ratings

Resources & documents

Contractor training

Power of Choice for contractors

Customer requested switching form

- view metering charges
- Register for electrical contractor industry updates
- Register for solar installer industry updates
- Organise customer requested switching (Isolation upstream)

Community
\$10,000 this

open for applications for not-for-profit



Questions & feedback

All resources available are currently undergoing an overhaul.

Do you have a question or feedback on the Portal Help & Guides available?

You can post your question or feedback in the chat now.



EWR Selections – Friendly Reminders

- A **Supply Upgrade** will always supersede a **POA relocation** and if a supply upgrade is required a CX application with this option needs to be submitted. Most EWRs will link to a POA relocation CX and this doesn't mean that it's correct. If you are ever increasing the amps or phases on network side you require a Supply upgrade CX with the correct bundling options of additional works.
- Always ensure the **phases/amps information** on your EWR matches the CX application as this is what has previously been approved. This will also eliminate delays with having to re-submit your paperwork.
- If you require a **Primary Fuse Upgrade** or have completed a **Mains Connection Box** replacement please submit an EWR for Primary Fuse Upgrade. Please note, this EWR type cannot be used to request Point of Attachment relocations.

EWR Selections – Friendly Reminders

- **Supply Upgrade EWRs** with the Category of ‘Connection / Supply’ are required on any upgrade or downgrade on a customer service line where the fuses or phases are changing. **Meter only upgrades or downgrades** will require an EWR with a Category of ‘Metering’.
- If you know that the supply is not available for what you are requesting remember to **tick the box advising that Supply is not currently available on the Connect**. If this is not ticked then the request will go through as a Basic Connect and will cause further delays in the long run. Need to tick that supply is not available so that the application can be investigated further.
- The secondary service of “**Drop and Re-erect Service**” only needs to be selected when you require our crews to make **2 site visits** to drop and re-erect the service line.

Restoration process



Part of Energy Queensland

Getting reconnected after storm damage, flooding or inundation



1 You are disconnected for safety

We have inspected and disconnected power to your premises due to storm damage, flooding, or inundation, and left an electricity defect report in your meter box.



2 Arrange a safety check

You, your building manager/body corporate, or landlord, need to arrange a safety check by a licensed electrical contractor.



3 Make safe

Your licensed electrical contractor will complete a safety check and fix any defects. They will complete and sign the contractor section of our electricity defect report and leave onsite to confirm your premises is safe for reconnection.



4 Arrange reconnection

You, your building manager/body corporate, or landlord will need to then contact us to arrange reconnection. Ask your licensed electrical contractor if they will do this on your behalf.

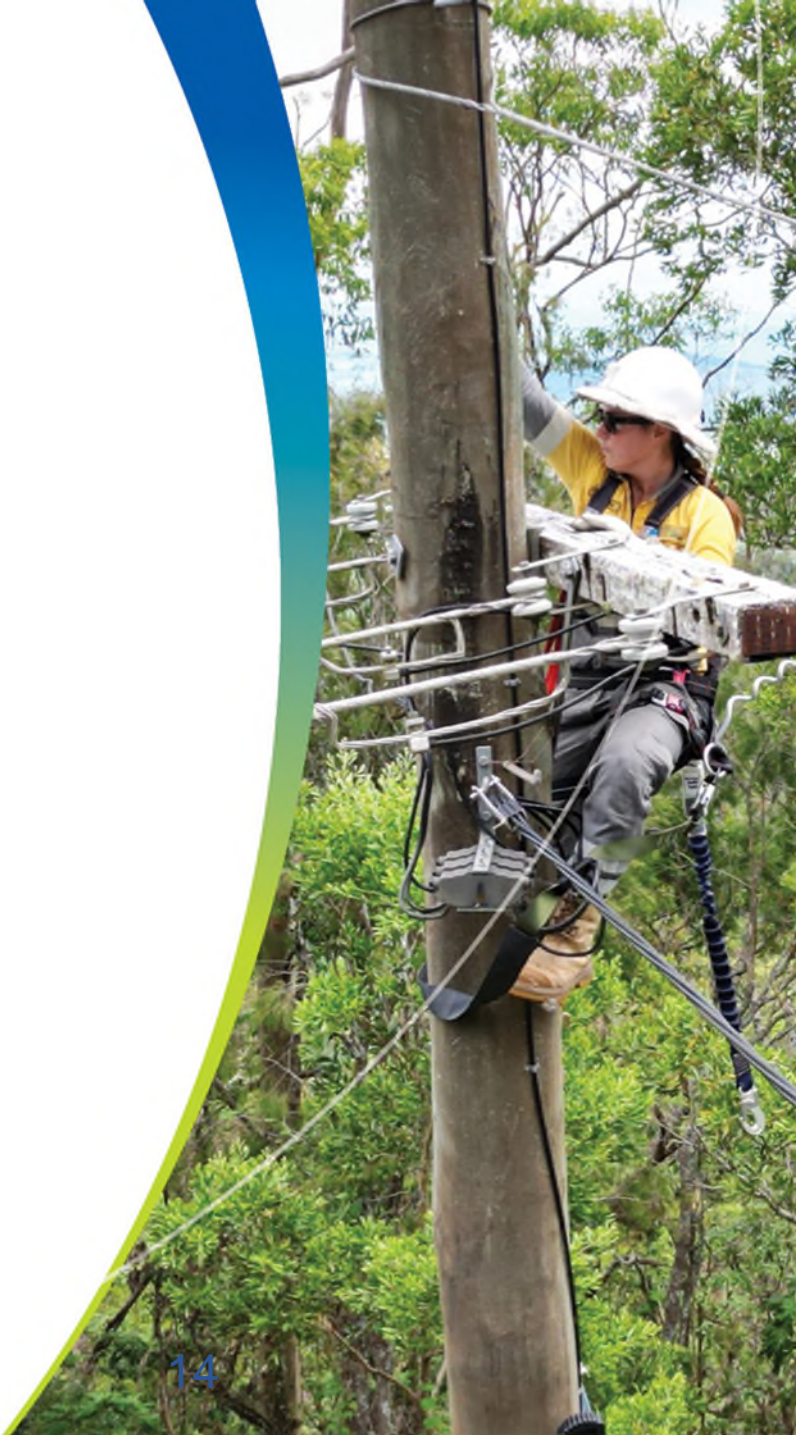


5 Premises is reconnected

Our crew will attend and confirm the defects have been rectified and reconnect your premises to the electricity network. You'll have power as soon as the network has been safely re-energised.

Note: If you know your electrical fittings have been damaged, flooded or inundated, you don't need to wait for an electricity defect report. Arrange a safety check and your licensed electrical contractor will leave a certificate of test and compliance in the meter box for us.

What can we do to improve your experience with Customer Operations?



Customer Technical Support group

Craig Matthews
Team Lead



Top 3 Electricity Defect Report issues preventing connection:

1. Consumers Mains installed without effective labelling & identification (QECM Clause 8.2.2 & 7.6.3.1)
2. Consumers Mains installed without sufficient mechanical protection (AS/NZS 3000:2018 Clause 3.9.4)
3. Main Switchboard installed in an unsuitable location (QECM Clause 9.8.1.2)

1. Consumers Mains installed without effective labelling & identification

QECM 7.6.3.1 (e) – UG consumer mains shall be identified and labelled as per clause 8.2.2

QECM 8.2.2- Consumer mains conductor labelling and identification

- (a) To support safe connection to the distribution system at the UG DNSP service point the Proponent shall clearly identify and label the consumer mains:
 - (i) at the point of attachment; and
 - (ii) so that the label is fixed to the outer sheath of the cable in a position that is visible without undue manipulation of the termination or the need for excavation.
 - (iii) the consumer mains shall be labelled with the correct street address as registered with local Council (lot number and street name) for the premises it is intended to supply once connected to the distribution system.

Examples



2. Consumers Mains installed without sufficient mechanical protection

3.9.4 Protection against mechanical damage

3.9.4.1 *General*

Wiring systems installed in positions where they may reasonably be expected to be subject to mechanical damage shall be adequately protected in accordance with Clause 3.3.2.6 and the applicable requirements of Clauses 3.9.4.2 to 3.9.4.4.

NOTE: Guide to adequacy and WS classification is provided in Appendix H.

3.9.4.2 *Wiring systems near building surfaces*

Wiring systems that are fixed in position by fasteners, or held in position by thermal insulation, or by passing through an opening in a structural member, shall be protected by one of the methods outlined in Clause 3.9.4.4 if they are concealed within 50 mm from the surface of a wall, floor, ceiling or roof.

Exception: This requirement need not apply to wiring systems that can move freely to a point not less than 50 mm from the surface in the event of a nail or screw penetrating the cavity at the location of the wiring system.

3.9.4.4 *Protection methods*

Where protection of a wiring system is required, in accordance with Clauses 3.9.4.2 and 3.9.4.3.2, the wiring system shall be –

- a) provided with adequate mechanical protection at a minimum of WSX3 to prevent damage (refer to Paragraph H5.4, Appendix H); or
- b) provided with an earthed metallic armouring, screen, covering or enclosure, to operate a short circuit protective device under fault conditions; or
- c) protected by an RCD with a maximum rated operating residual current of 30 mA.

NOTE: Where conductive mechanical protection is installed to meet the requirements of 3.9.4.4(a), for the protection of double insulated conductors, earthing of the conductive mechanical protection need not be provided.

Examples



3. Unsuitable locations

9.8.1.2 Unsuitable locations

A meter board with network devices and metering equipment shall not be installed in any of the restricted locations for in clause 2.10.2.5 of AS/NZS 3000 or any of the unsuitable locations in Table 52.

Category	Unsuitable locations for a meter board and associated equipment
(a) Pools or spas	<ul style="list-style-type: none">i) Within or at any height above any pool or spa zone as defined in AS/NZS 3000.ii) Any location where the only point of access is through the fenced area around a pool or spa.
d) Trafficable areas	<p>In trafficable areas where the equipment or a person working on the equipment would not be adequately protected, including but not limited to:</p> <ul style="list-style-type: none">(i) In vehicle docks.(ii) Driveways.(iii) Factory walkways.(iv) Carports.

Questions



ENERGY ACADEMY

November
2024

ELECTRICAL PARTNERS' PORTAL UPGRADE & NEW LOOK & FEEL



Part of Energy Queensland



A photograph of a meeting in a modern office. A man in a white shirt stands at the front, facing a group of people seated at a table. The room has large, multi-paned windows overlooking a city and mountains. Three teal cloud-shaped graphics are overlaid on the image, containing the text 'Technology Uplift', 'Modern', and 'User Experience'.

Technology Uplift

Modern

User Experience

WHY?

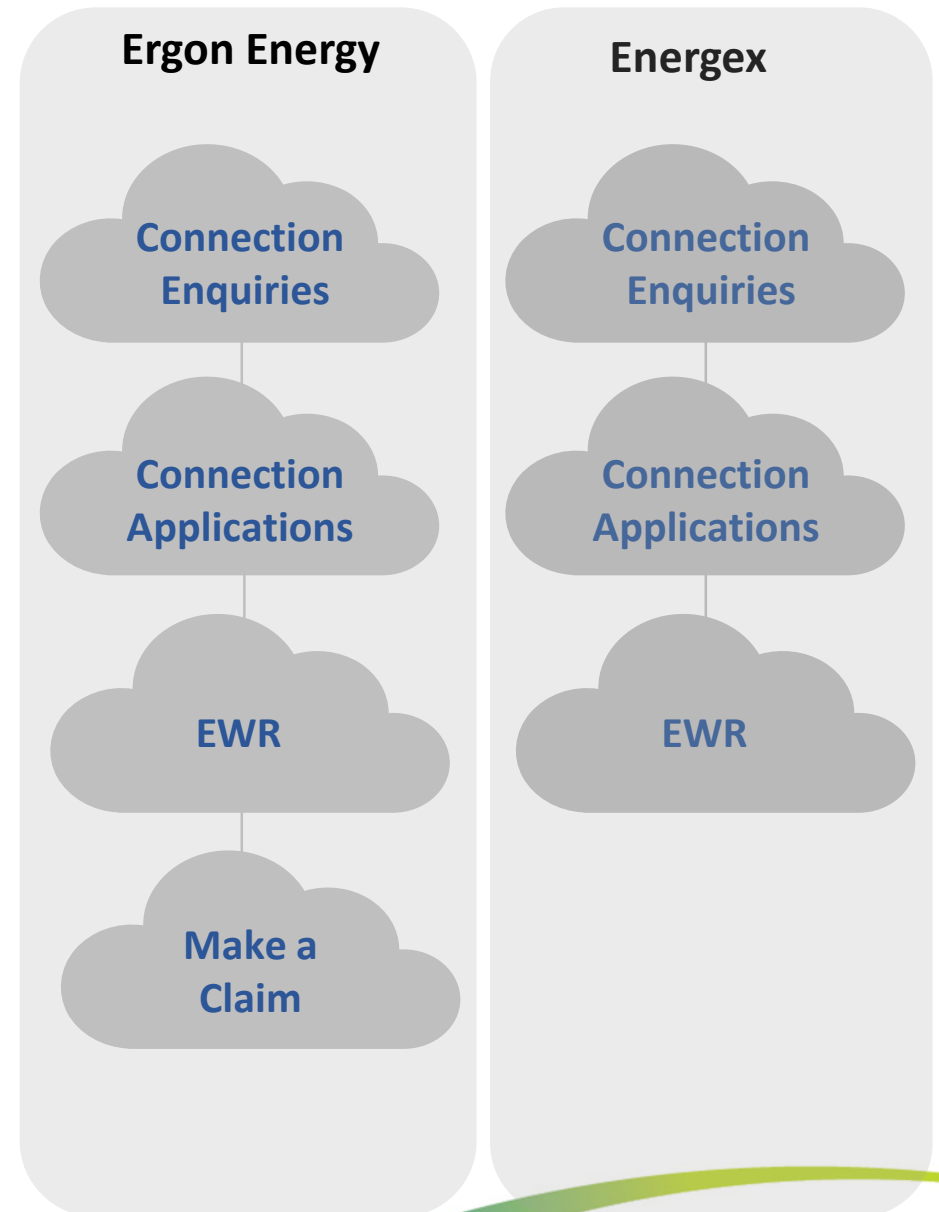
Energy QLD are progressing a Customer and Market system modernisation program for the Ergon Energy and Energex distribution businesses.

Our CURRENT Electrical Partners Portals'

- ✓ Approximately 6,000 regular users
- ✓ Submit an Enquiry about connecting to our Network
- ✓ Submit a Connection Application to connect to our Network
- ✓ Submit an Electrical Work Request (EWR)
- ✓ Apply for an EC Reimbursement



Part of Energy Queensland



Our FUTURE Electrical Partners' Portal

New, simplified sign in
and user registration
process



New, simpler
communications, user
agreements and notifications



New real time updates, with
new workflows syncing to
EQL Customer Information
System (CIS)



Only one log-in required using an
email address – no more having to
remember a username!



New look and feel
platform - easier to use



New notifications available and ability to
link customers to connection
applications in keeping with compliance
obligations



New URL for ease of access



Cloud
based



Single
Instance



The New Portal Experience



Part of Energy Queensland

Electrical Work Request (EWR)

8:37 AM, Thursday 24 August 2023

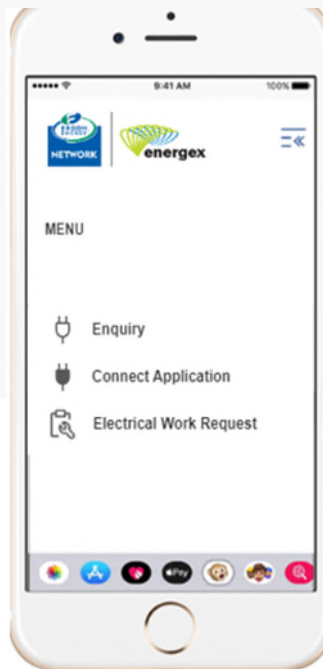
FY2023

Form 3 (Incomplete)	0	Form 3 (Complete) < 60 Days	0
Open	0	Open > 30 Days	0
Awaiting Retailer Requests	0	Saved	0

CREATE NEW +

[EWR Reference Number](#)
[NMI](#)
[Premise](#)
[Service Type ↑](#)
[DNSP Status](#)
[MP Status](#)
[User \(Group\) ↑](#)
[Created On ↓](#)

There are no records to display.



Connect Application (CX)

8:49, Thursday 24 August 2023

FY2023

Serial number(s) required	9999	Awaiting Energex/Ergon	9999
Under offer	100	EWR in progress	100
Offer accepted	9999	Saved	150
		Open enquiries	100

CREATE NEW +

Connect Reference Number	EWR Reference Number	NMI	Premises	CX Application Type ↑	CX Service Selection ↑	Application Status ↑	User (Group) ↑	Submitted Date ↓
CX23QUE1001856A		12345678909	U/99 LOT. 5, 100 QUEEN BRISBANE 4000 PLAN: 123765	Change to an Existing Connection	Permanent Supply	Submitted		23/08/2023
CX23QUE1001858A		12345678909	U/99 LOT. 5, 100 QUEEN BRISBANE 4000 PLAN: 123765	Change to an Existing Connection	Permanent Supply	Submitted		23/08/2023
CX23QUE1001860A		12345678909	U/99 LOT. 5, 100 QUEEN BRISBANE 4000 PLAN: 123765	Change to an Existing Connection	Permanent Supply	Submitted		23/08/2023
CX23QUE1001862A		12345678909	U/99 LOT. 5, 100 QUEEN BRISBANE 4000 PLAN: 123765	Change to an Existing Connection	Permanent Supply	Submitted		23/08/2023
CX23QUE1001864A		12345678907	U/2 LOT. 5, 100 QUEEN BRISBANE 4000 PLAN: 123765	Change to an Existing Connection	Temporary Builder's Supply	Submitted		23/08/2023
CX23QUE1001854A		12345678907	U/3 LOT. 5, 100 QUEEN BRISBANE 4000 PLAN: 123765	New Connection		Submitted		
CX23TWI1001663A		03759430274	U/132 LOT. 11, 10 TWIN RANGES VICTORIA POINT	New Connection	Permanent Supply	Accepted		

Please note: Final version delivered to production may differ from above preview

Connect Application (CX)

8:49, Thursday 24 August 2023

FY2023

Serial number(s) required	9999	Awaiting Energex/Ergon	9999
Under offer	100	EWR in progress	100
Offer accepted	9999	Saved	150
		Open enquiries	100

CREATE NEW +

All Connect Applications ▾

Search



<u>Connect Reference Number</u>	<u>EWR Reference Number</u>	<u>NMI</u>	<u>Premises</u>	<u>CX Application Type</u> ↑	<u>CX Service Selection</u> ↑	<u>Application Status</u> ↑	<u>User (Group)</u> ↑	<u>Submitted Date</u> ↓
CX23QUE1001656A		12345678909	U/99 LOT: 5, 100 QUEEN BRISBANE 4000 PLAN: 123765	Change to an Existing Connection	Permanent Supply	Submitted		23/08/2023
CX23QUE1001658A		12345678909	U/99 LOT: 5, 100 QUEEN BRISBANE 4000 PLAN: 123765	Change to an Existing Connection	Permanent Supply	Submitted		23/08/2023
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CX23QUE1001664A		12345678907	U/2 LOT: 5, 100 QUEEN BRISBANE 4000 PLAN: 123765	Change to an Existing Connection	Temporary Builder's Supply	Submitted		23/08/2023
CX23QUE1001654A		12345678907	U/3 LOT: 5, 100 QUEEN BRISBANE 4000 PLAN: 123765	New Connection		Submitted		23/08/2023
CX23TWI1001663A		03759430274	U/132 LOT: 11, 10 TWIN RANGES VICTORIA POINT	New Connection	Permanent Supply	Accepted		23/08/2023

Please note:
Final version delivered to
production may differ from
above preview

MENU



HELP



*Here is a snapshot of what you
will learn more about:*

- ✓ How to access the new portals
- ✓ How to register and/or add an authorised user
- ✓ How to navigate the new portals
- ✓ How to submit an Enquiry/Connection Application
- ✓ How to accept a Connection Application
- ✓ How to submit an EWR
- ✓ How to edit a submission
- ✓ How to submit a Self-Read
- ✓ How to Search/make a payment/ update notifications
- ✓ How to submit a Consumer/Industry PeakSmart rewards claim
- ✓ How we will establish your new Portal account using your existing Portal account details



Thank you for joining us.

If there are any questions you would like to ask following this session, please reach out to:

CustomerAdvocacy@energyq.com.au



Part of Energy Queensland

Dynamic connections, emergency backstop and EV charging



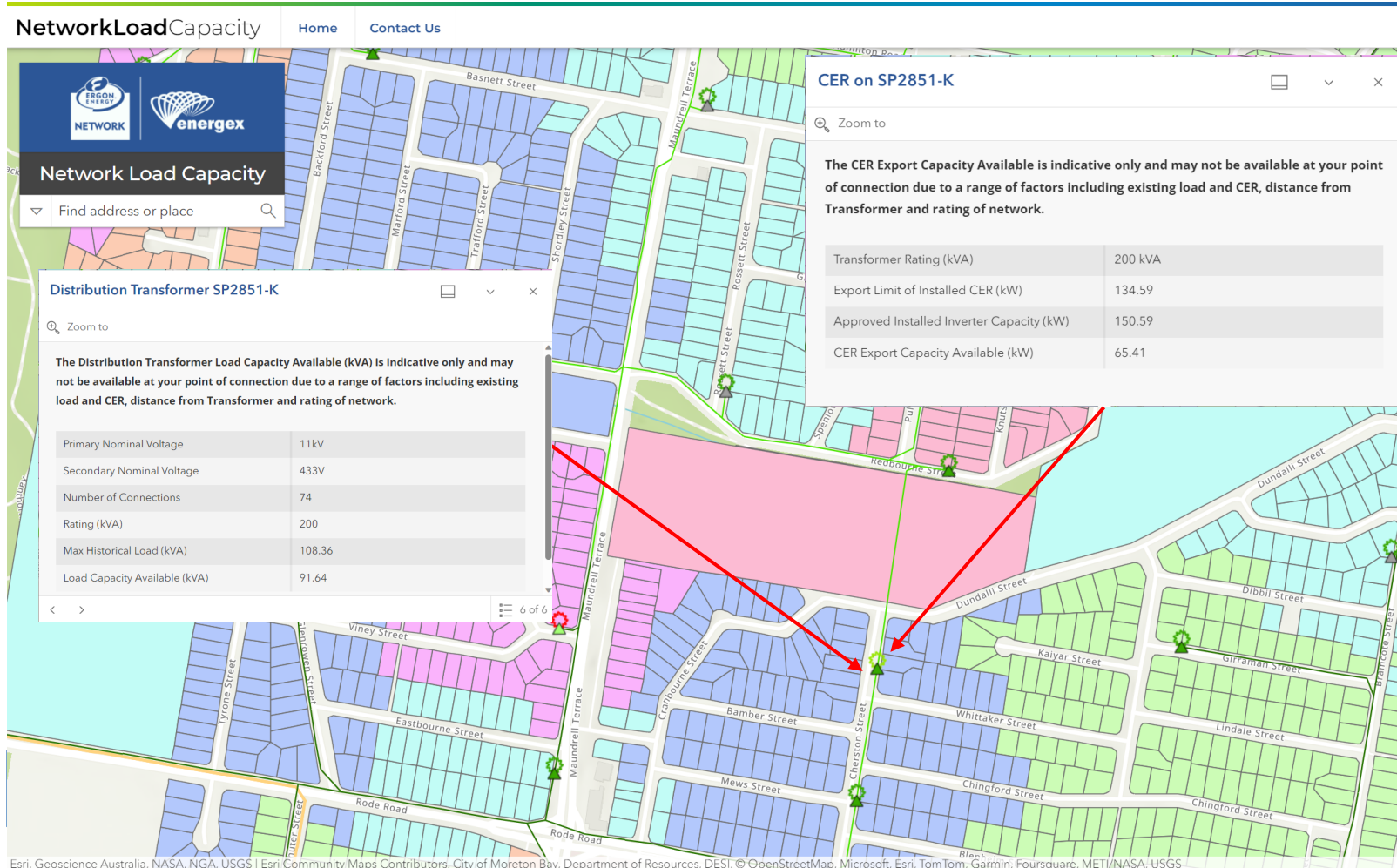
What does the future hold?



Dynamic connections, requirements for home electric vehicle charging (>20amp) and the Emergency Backstop mechanism all form part of our response to maintain a safe and reliable grid.

Improving Grid Visibility

****New**** Network load capacity map showing network assets & available capacity – can help understand if a site may be restricted for export.



Improvements coming in 2025

- LV Distribution Network
- Differentiate between Overhead & Underground
- DNSP easements
- Feeder classifications
- LGA Boundaries

What is a dynamic embedded generation (solar, BESS and V2G EVES) connection?

A voluntary alternative to a fixed export arrangement, whereby customers can export more to the grid, when the grid is able to safely accept it. These are the main advantages:

1. Customers can export more

Dynamic connections can export up to 10kW per phase, compared to a maximum of 5kW per phase on a basic connection (or 2kW for premises connected to our regional single wire earth return (SWER) network), and most customers will experience minimal or no restrictions on that limit most of the time.

2. Minimum export limit

Even when there is a need to reduce solar export, customers are still allowed to export 1.5kW.

3. Customers can install a larger system

You can install a larger combined solar PV and battery system up to 20kVA with a dynamic connection on single-phase – up to 10kVA solar PV inverter and 10kVA battery inverter capacity – without the need to upgrade to multi-phase power (which would be required for a fixed export connection).

Note: Sites using a hybrid inverter (PV and battery capable) under a dynamic connection on single-phase, can only install up to 10kVA total inverter capacity.



What makes a dynamic solar connection work?

Key component	What is it?
Hardware requirements	Must use an inverter compliant with CSIP Aus OR utilise a compliant gateway device & inverter combination, with Wi-Fi or ethernet capability.
Administrative requirements	<ol style="list-style-type: none">1. Complete an Embedded Generation Connect and for the <i>Proposed Export Limitation</i> select Dynamic Export.2. Accept the Negotiated Connection Contract.3. Submit an Electronic Work Request (EWR).
Registration & commissioning	<ol style="list-style-type: none">1. Register your inverter / gateway device with our SEP2 server through our simple web form.2. Commission the inverter / gateway device, following the procedures from the inverter / gateway device OEM.
Dynamic operation	Our SEP Server sends signals every 5 min, based on real-time and forecast limits on export (if internet connectivity lost, will default to 1.5kW max export).



Supporting Dynamic Connections



CPD training package

Queensland Dynamic Connections
30 CPD Points - Queensland Dynamic Connections Installer Training: Basics of rooftop solar, installation, and commissioning.
E-learning ENGLISH

Course Description

30
Queensland Dynamic Connections
Completed

Earn your completed badge!

ERGON ENERGY NETWORK | energex

Takes 30 mins
30 SAA points

New customer and installer facing web content

energex

Outages Safety Manage Your Energy Our Services Contractors

Our Services > Connections > Residential & commercial connections > Solar connections & other technologies > Dynamic Connections for energy exports

Dynamic Connections for energy exports

Welcome to the future of electricity network connections – the smart way to boost your solar exports!

Queensland has one of the highest rates of solar photovoltaic (PV) system installations in the world. This only looks set to increase as people embrace renewable energy alternatives for their homes and businesses, and more large renewable energy projects are connected. We want to support everyone who wants to install solar PV on our network. To achieve this, we need smarter interaction between solar PV systems and our electricity network. Customers now have the ability to choose a dynamic connection for their solar system. Read more about why we've introduced this option and how dynamic connections for solar is a smart choice by selecting one of the below options.

- About Dynamic Connections**
Learn about dynamic connections and how they could benefit you.
[View more](#)
- Homeowners & small business**
Find out how to arrange a dynamic connection for your premises.
[View more](#)
- Dynamic Connections for installers**
Access key technical information and learn how to apply and install a dynamic connection.
[View more](#)

energex.com.au/dynamic-connections
ergon.com.au/dynamic-connections

Dynamic Connections Factsheet

Queensland has one of the highest rates of solar photovoltaic (PV) system installations in the world. This trend looks set to continue as people embrace renewable energy alternatives for their homes and businesses. We want to support everyone who wants to install solar PV on our network. To achieve this, we need smarter interaction between solar PV systems and our electricity network.

Dynamic connections
To support more solar on our network we are offering dynamic connections. With a dynamic connection, signals are sent from our network to your solar PV, or a hard-wired external connection, using Wi-Fi or a hard-wired external connection and we refer to this as Dynamic Operating Directions (DOD). The signals tell your solar PV system how much electricity generation our network can accept at that point in time. Having a dynamic connection usually allows fixed system restrictions to be removed, so your solar PV system can export more.

How it works

- Monitor**
We monitor the capacity of your local electricity network.
- Calculate**
We calculate how much of your excess energy can be exported to the grid.
- Signal**
Your inverter receives a signal via a network communication line with our network.
- Maximise export**
The signal allows your system to maximise the export of your excess energy, based on available network capacity.

Access via:

learnlab.cleanenergycouncil.org.au

Customer factsheets and animations

Our system monitors network capacity

Play (K)

0:13 / 0:49



Keeping the grid secure – Emergency Backstop

Why do we need a backstop?

On the distribution network, the amount of demand for electricity needs to be balanced with supply (from large generators and rooftop solar) in order to maintain grid stability. On days that have large amounts of rooftop solar being exported and low network demand, there is a risk that the system could become unstable or even blackout, particularly if the main interconnector between Qld and NSW has an outage. Backstop enables us to help increase the amount of load on the system by temporarily (a few hours) preventing solar generation during minimum system conditions.

Backstop will ONLY be triggered on instruction from AEMO during a "Minimum System Load Level 3" condition (rare, we expect maybe once per year or less).

The risk of occurrence is low, but consequences are high. So, we need the solar industry's help to ensure connections are compliant and the grid is secure.

8.10.2 Emergency backstop mechanism

The following requirements apply to a GSD for EG Systems that are to have an *emergency backstop mechanism* under a relevant EG connection standard in clause 8.15.1:

- (a) The GSD shall be installed in compliance with AS/NZS 3000.
- (b) A connection with an individual inverter that is required under an EG connection standard in clause 8.15.1 to have a GSD shall meet the requirements of the relevant drawing, based on aggregate inverter capacity at the *premises*, as per Table 43:

Table 43 GSD for individual inverter

Aggregate inverter capacity at <i>premises</i> ¹	Drawing number
≥ 10 k VA and ≤ 30 kVA	QCD05-01
> 30 kVA	QCD05-04

Note 1 – Including inverters with ESS DC sources

- (c) A connection with multiple inverters that are required under an EG connection standard in clause 8.15.1 to have a GSD shall meet the requirements of the relevant drawing, based on aggregate inverter capacity at the *premises*, as per Table 44:

Table 44 GSD for multiple inverters

Aggregate inverter capacity at <i>premises</i> ¹	Drawing number
≥ 10 k VA and ≤ 30 kVA	QCD05-02 or QCD05-03
> 30 kVA	QCD05-05, QCD05-06 or QCD05-07

Note 1 – Including inverters with ESS DC sources

Queensland Electricity Connection Manual

Service and Installation Rules

Effective from 21 February 2024



Part of Energy Queensland

Release: 4, 12 Dec 2023 | Doc ID: 2912908
Uncontrolled When Printed 1 of 219

Since February 2023, under the Emergency Backstop mechanism, a Generation Signalling Device (GSD) needs to be installed in new and certain upgraded solar systems, 10kVA or above.

Keeping the grid secure – Emergency Backstop - Compliance

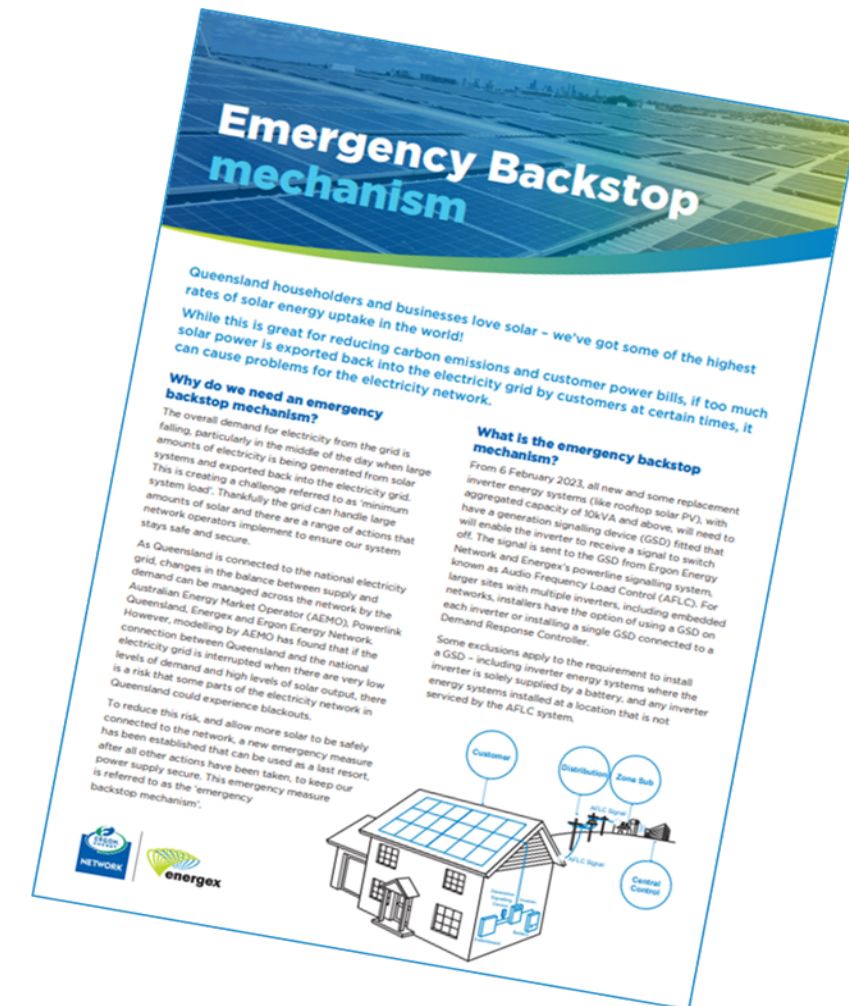
We are undertaking inspections to ensure the Generation Signalling Device (GSD) is installed and operating correctly when a demand response signal is sent to the GSD.

Where a non-compliance is identified, we will firstly notify the Solar Company /Installer responsible for submitting the Connect application, followed by the retail customer if the non-compliance is not rectified as a matter of priority.

Failing to rectify the non-compliance may result in the connection contract being terminated and the embedded generation system being disconnected from the network.

We are investigating further enforcement options for installers who are routinely found to be non-compliant, such as limiting access to submit Connect applications or Electronic Work Requests (EWR).

Since February 2023, under the Emergency Backstop mechanism, a Generation Signalling Device (GSD) needs to be installed in new and certain upgraded solar systems, 10kVA or above.



Having an emergency 'lever' helps keeps the lights on for all customers!

Emergency Backstop – key resources for installers

- Locate the "Emergency Backstop Mechanism" webpage on the Distributors website by searching "Backstop".
- Webpage contains:
 - Matrix table advising when Backstop is required.
 - Factsheet to assist in explaining requirements to customers on a document from the Network Providers.
 - NMI Check function to confirm if backstop is required for an individual NMI as not required in Non-AFLC areas.
 - A Frequently Asked Questions link with answers to many technical questions.
- Qld Electricity Connection Manual (QECM) clause 8.10.2 - connection detail and QECM Appendix A – Drawings.
- A method to test the Inverter settings and GSD before leaving site - removing the RJ45 plug from the DRM mode port on the inverter, or by disconnecting the GSD from the terminal block. This should trigger the Demand Response Mode (DRM) 0 functionality to cease generation in accordance with clause 3.2.2 (d) of AS/NZS 4777.2.

We are interested in your feedback...

Are you facing challenges complying with the Emergency Backstop requirements?

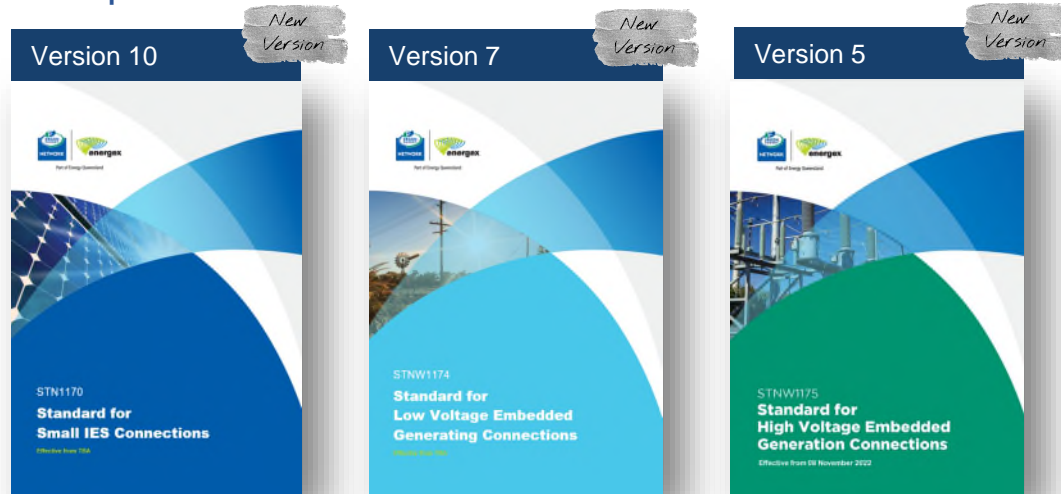
We'd like to understand the challenges you are facing as we would prefer to work with industry on a solution, please contact us at:

- Ergon Energy Network demandmanagement@ergon.com.au
- Energex demandmanagement@energex.com.au



Updating DNSP Standards for AS/NZS 4777.1:2024

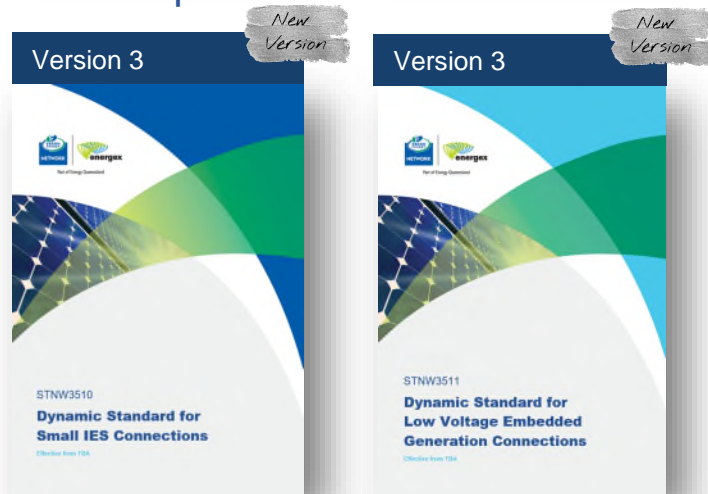
Fixed export



23 August 2024
**AS/NZS 4777.1:2024 &
AS/NZS 4777.2:2020
Amendment 2:2024 released**

1

Dynamic export



Late 2024
**Draft standards released for
industry consultation with
AS/NZS 4777.1:2024 updates**

2

23 February 2025
**New versions of DNSP
standards released and in
effect**

3

Questions



Qld EV Charging Options (QECM V4 February 2024) for single-phase chargers – Premises 100A/phase or less

Still available

1. GPO, slow charging

- Should be confirmed safe and compliant by an EC.
- Up to 20A (2.3 - 4.6kW AC charging).
- No management required.
- “Solar soak” available.
- Cheap to install.
- Good for average, daily charging.



2. EVSE connected to a load control tariff via network managed device.

- 7kW AC charging at property.
- Minimal charging management (no daily) but On/Off
- Fixed c/kWh for energy (no demand charges)
- Cost of EVSE
- Suited to charging when greater daily mileage requires.



New

3. Basic Active EVSE

- Network device, on primary tariff
- On/Off charging
- No additional cost to customer
- EWR required



New

4. Dynamic EVSE

- Dynamic connection, on primary tariff
- Requires a CSIP-AUS compliant provider
- Import limit can be varied.
- No EWR required

4a. Direct to EVSE



4b. Gateway to EVSE



4c. Platform



Advantages of connecting to a primary tariff

- 7kW AC charging at property
- “Solar soak” available & time of use tariffs, where available.
- External charging management access necessary. Only used when required.

How to connect an EVSE as dynamic?

(does not require an EWR, unless other applicable works are being undertaken)

- 1 **Review technology options** – the list of compliant gateway devices is on www.energex.com.au/evse OR www.ergon.com.au/evse – look for providers with a Compliance Type “L” that have devices compatible dynamic EVSE connection.
- 2 **Register gateway device** – complete the online registration form (either Ergon Network or Energex web sites – search for “dynamic EVSE registration form”)

Doing this step *before* the EVSE is installed allows you to fully commission the dynamic connection when installing the EVSE (allow up to 10 business days for the registration).
- 3 **Install EVSE and connect the gateway device** – Refer to gateway device installation and commissioning instructions
- 4 **Maintain connection** – ensure the gateway device maintains connection with our SEP2 Server – typically based on customer’s internet connection. Loss of comms will trigger the device to revert to a lower fixed output (1.5 kW will be the dynamic import limit for the installation while signal is lost)

Supporting EV uptake

Customer focused web content

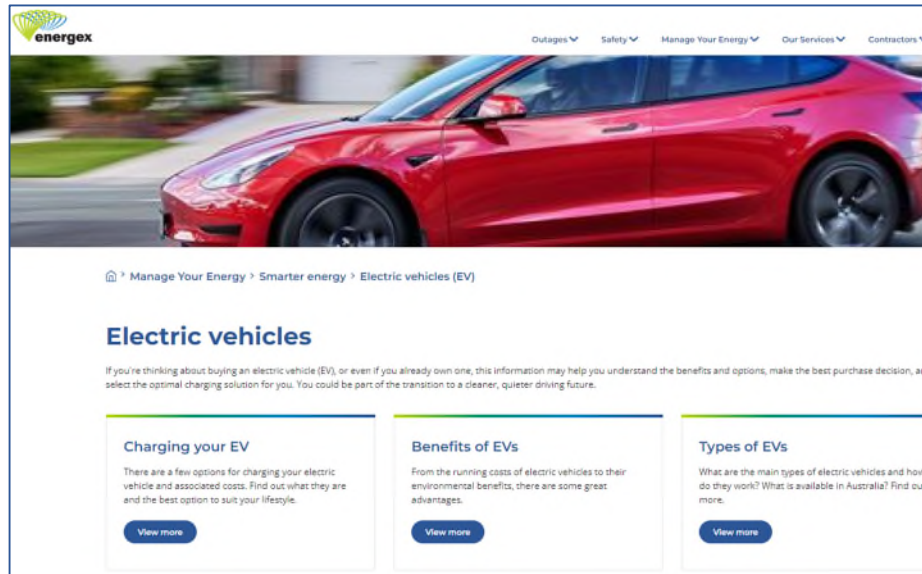
energex.com.au/electricvehicles

ergon.com.au/electricvehicles

Factsheet & animation on EV charging at home

Installer focused web content & QECM FAQ's

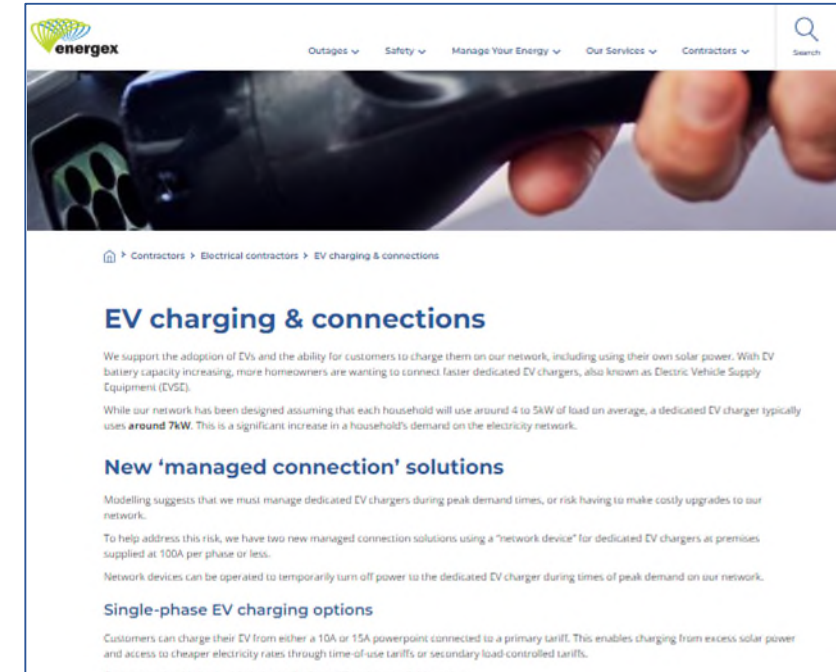
energex.com.au/evse
ergon.com.au/evse



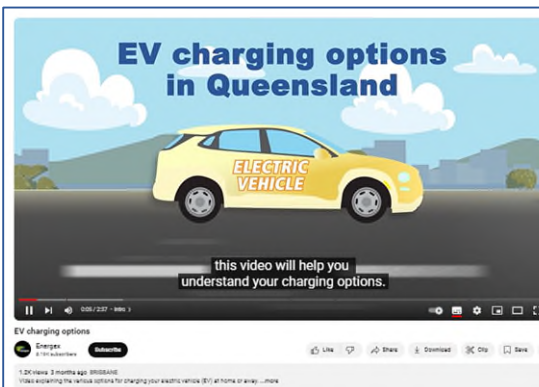
The screenshot shows the Energex website's 'Electric vehicles' page. At the top, there is a navigation menu with links for Outages, Safety, Manage Your Energy, Our Services, and Contractors. Below the navigation is a large image of a red Tesla Model 3. Underneath the image, there is a breadcrumb trail: Home > Manage Your Energy > Smarter energy > Electric vehicles (EV). The main heading is 'Electric vehicles'. Below this, there is a sub-heading: 'If you're thinking about buying an electric vehicle (EV), or even if you already own one, this information may help you understand the benefits and options, make the best purchase decision, and select the optimal charging solution for you. You could be part of the transition to a cleaner, quieter driving future.' There are three main content blocks: 'Charging your EV', 'Benefits of EVs', and 'Types of EVs'. Each block has a brief introductory text and a 'View more' button.



The screenshot shows a factsheet titled 'Charging your EV at home'. It features the Energex logo and a background image of a car. The text explains different ways to charge an EV at home and the rules that apply. It is divided into two main sections: 'Charging from a powerpoint' and 'Charging from a dedicated charger'. The 'Charging from a powerpoint' section discusses the rate of charging, which depends on the amperage (A) of the powerpoint, and lists options like overnight charging, day time charging, time-of-use tariffs, and economy tariffs. The 'Charging from a dedicated charger' section discusses faster charging, three-phase charging, and the cost of supply and installation. A 'Tip' box at the bottom left provides advice on powerpoint capacity. An image of a charging cable is shown on the right side.



The screenshot shows the 'EV charging & connections' page on the Energex website. It features the Energex logo and a navigation menu. Below the navigation is a large image of a hand plugging a charging cable into a car. The main heading is 'EV charging & connections'. Below this, there is a sub-heading: 'New 'managed connection' solutions'. The text explains that the network is designed to support EV charging and that managed connection solutions are being implemented to manage peak demand. It also mentions 'Single-phase EV charging options' and provides information on how customers can charge their EV from either a 10A or 15A powerpoint connected to a primary tariff.



The screenshot shows an animation titled 'EV charging options in Queensland'. It features a yellow car with 'ELECTRIC VEHICLE' written on its side. The background shows a cityscape with a blue sky and white clouds. Below the car, there is a video player interface with a play button, a progress bar, and a volume icon. The text 'this video will help you understand your charging options.' is displayed above the video player. Below the video player, there is a 'Subscribe' button and a 'Share' button.

Questions



Low Voltage Overhead Service Maintenance



Mains Connection Box Maintenance & Replacement




Mains Box Replacement

- During the current Ergon & Energex Overhead Service Maintenance program installations are found with older style copper mains boxes being inaccessible i.e. covers are stuck with paint or restricted by flashing etc. or fitted with non-compliant Consumers Mains. i.e. the mains box cannot be replaced to accommodate the XLPE cable.
- Where this is the case, staff will replace the Overhead Service cable and terminate to the copper mains box with copper tails via Crimp Sleeves or IPC's. A Form 3 is then issue to the customer to have the copper mains box / consumers mains replaced to meet the current Standards.
- Electrical Contractor's are reminded to remove the Crimp Sleeves /IPC's and copper cable tails during the installation of the new mains connections box.



Mains Box Replacement


- QECM
 - **5.2.4 Provisions of consumer mains and means to terminate**
 - The Customer shall:
 - (a) Provide and maintain consumer mains at their expense.
 - (b) Provide suitable terminations as per this manual on the consumer mains for connection by the DNSP to the DNSP termination and point of attachment at the DNSP service point.
- 

Mains Box Replacement

- QECM
- **6.3.1 Provision of access to the service line**
- The Customer shall ensure sufficient clear unobstructed access to the service line, around, and below the DNSP termination, point of attachment and connection point to allow the DNSP to safely maintain the service line.



Mains Box Replacement

- QECM
 - **6.7.4 Distribution Network Service Provider (DNSP) termination of LV OH service line**
 - The LV OH service line at the DNSP termination shall meet the following requirements:
 - (a) Be located within 600 mm of the point of attachment.
 - (b) For LV OH service line cables up to 95mm², a **suitable mains connection box** that meets the following requirements:
 - (i) equipped with house service connectors for the connection of an OH service line by the DNSP; and
 - (ii) mounted to provide adequate support by brackets or similar and not be reliant on rigid conduit for support.
- 

Mains Box Replaced and HSC's still connected with copper cables



Questions



Energy Academy 2024 Connections





Compliant Connection Applications

Application Efficiencies:



Key Components:

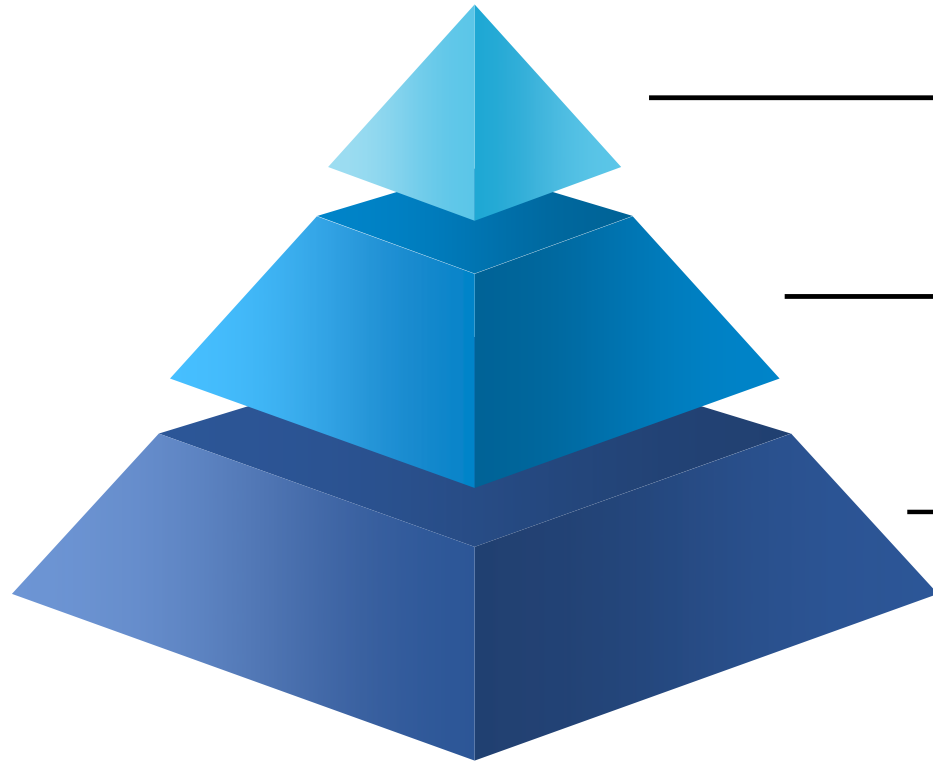
- Point of Supply
- Maximum demand Calculations
- Motor/Pump Details

Site-Specific Requirements:

- Council Approval
- Transformer Drawings
- Application Readiness



Requirements by Work Type



Rural Applications

Point of Supply, Maximum Demand,
Site Plan

Pumps/Non-Domestic Equipment

Start method, Running current,
Usage details

Subdivisions

Council Decision Notice, Survey
Plan, Lot Layout



Portal EWR - Enquiry vs Application vs Relocation Selection

1

Enquiry

For initial information requests

Connection Applications >1MVA (LCC)

2

Application

For formal connection requests

EWR's >100Amps

3

Relocation

For moving existing connections

energex
positive energy

Service Selection

Select the Enquiry Type required

Please Select...

- Please Select...
- Supply Availability
- Asset Relocation
- Point of Attachment
- Large Customer Connection**
- Embedded Generation (inc. Solar) If you have a connection which will draw more than 100Amps, this Enquiry type can be 'progressed' to a Connection Application.
- Budget Estimate

ERGON ENERGY
NETWORK

MyHome MyProfile MyEWR MyENQUIRY **MyCONNECT** MyCL

CONNECT

New
Submit EWR

Saved

Form 3 (incomplete)

Service Selection

Service Type: New Connection

Selection: Provision of New Network Connection (No Existing Service), P...

Detailed Enquiry
Please complete all fields before submitting.

Selection

Enquiry Type: Please Select...
 Please Select...
 Supply Availability
Asset Relocation
 Point of Attachment Enquiry Only
 Embedded Generation (inc. Solar) of more than 30kVA
 Budget Estimate
 Subdivisions and Boundary Realignment

Premises/Address Search

Search by NMI, Meter Number, Premises Name

NMI: [input] Search

Unable to find the premises? [Manually enter a new premises.](#)



Enquiry vs Application – FAQ's



Connection Details

AS3000 Maximum Demand amps per phase. A detailed load breakdown may be requested at a later date. ?

Phases Required 1 2 3 ?

Is electricity supply available to your property from the existing Energex network? Yes No

Pole/Pillar No.

Number of Connections required at this point

If this is a bulk metering site, please respond with "1" to the Number of NMs.

If you know the Network requires upgrading or are unsure, tick the NO button

Do I need an Enquiry or An Application?	
Im unsure if there is LV Network / 3 Phase / supply in the street	Supply Availability Enquiry
I need a 2nd Point of Supply / Flying Fox Connection	Energex Network Supply Availability Enquiry <i>(attach dispensation if available)</i>
	Ergon Energy Network Connect Application <i>(attach dispensation provided)</i>
I need a feasibility study to assist in organising my council Decision Notice (DA Conditions) and/or (South East) CBD Fringe or Equivalent suburb	Supply Availability Enquiry
I know there isnt supply available, but I don't have a large load (e.g 3ph 40amps)	Connect Application <i>(select 'No' to Supply Available question)</i>
I know supply is available, but I don't have a large load (e.g 3ph 40amps)	Connect Application <i>(select 'Yes' to Supply Available question)</i>
I am unsure if there is supply available, but I have a large load (e.g 3ph 120amps)	Connect Application



Useful Links



[Energex Portal User Guide external website](#)

[Ergon Portal User Guide external website](#)

[Energex EP Portal external website](#)

[Ergon EP Portal external website](#)



[New connections | Ergon Energy](#)

[FAQ Results | Energex](#)

[Connect to the network checklist](#)



Questions



Thank you for your attendance

- Recordings and slide packs will be available on our Network Websites and sent to all attendees
- For any further enquiries or questions please contact customeradvocacy@energyq.com.au
- Keep informed about what's happening in the industry and any changes to compliance, rulings and legislation and sign up to our Industry Alert
 - [Ergon Energy Network](#)
 - [Energex](#)

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Energex

