PUBLIC DISCLOSURE STATEMENT

FELIX MOBILE

PRODUCT CERTIFICATION
FY2020–21 (TRUE-UP)

Australian Government

Climate Active
Public Disclosure Statement

An Australian Government Initiative

NAME OF CERTIFIED ENTITY	TPG Telecom Limited
REPORTING PERIOD	1 July 2020 – 30 June 2021 (true-up)
DECLARATION	*To the best of my knowledge, the information provided in this public disclosure statement is true and correct and meets the requirements of the Climate Active Carbon Neutral Standard.*
	Paul Tierney General Manager – Business Development

Australian Government
Department of Industry, Science, Energy and Resources

Version September 2021. To be used for FY20/21 reporting onwards.

1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	160 tCO2-e
THE OFFSETS BOUGHT	58.1% ACCUs, 41.9% VERs
RENEWABLE ELECTRICITY	100% renewable electricity
TECHNICAL ASSESSMENT	16 June 2020 Kara Robinson South Pole Australia Pty Ltd **Next technical assessment due:** 31 October 2023

Contents

1. Certification summary....3
2. Carbon neutral information....4
3. Emissions boundary....6
4. Emissions reductions....10
5. Emissions summary....11
6. Carbon offsets....14
7. Renewable Energy Certificate (REC) summary....18

Appendix A: Additional information....19
Appendix B: Electricity summary....20
Appendix C: Inside emissions boundary....22
Appendix D: Outside emission boundary....23

2. CARBON NEUTRAL INFORMATION

Description of certification

felix's account covers the six GHGs covered by the Kyoto Protocol: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF_6). All emissions are reported in tonnes of carbon dioxide equivalent (tCO_2-e).

This Climate Active Product certification is for the provision of access to the mobile network for felix customers. This product includes the operation and maintenance of the mobile network and the production, distribution and end-of-life for the SIM cards which are used by felix customers to access the network.

The scope of this product certification includes:

- TPG Telecom Limited mobile network construction and maintenance
- the operation of TPG Telecom Limited re-owned and shared mobile network assets
- the use of network assets owned and operated by third parties, including outgoing data roaming
- materials and manufacturing of SIM cards and packaging
- upstream and downstream freight of SIM cards and packaging
- SIM card warehousing
- end-of-life for SIM cards and packaging.

"It is critical that businesses understand their impact on the environment, work to minimise and offset these impacts, and where possible actually drive positive impacts for the benefit of our future generations. "

The functional unit for this product certification is: 1 year of access to mobile 3G/4G voice and data for one felix customer - excluding customer device and associated use.

Product description

felix is a new digital mobile service provider, launched by TPG Telecom Limited (ABN 76096304620) in 2020, which offers mobile phone plans leveraging the TPG mobile network.

felix exists as a business unit within TPG Telecom Limited (ABN 76096304620) and is not a registered business with a unique ABN. As a result, certification as an 'Organisation' under the Climate Active Carbon Neutral Standard for Organisations was not possible.

felix has both a product and service Climate Active certification. The product certification is deemed to be the child certification and as such, any shared emission sources will be offset through the service certification only as per the Climate Active guidance on *Emission boundary: Shared emissions.*

felix does not sell handsets. felix's product offering is limited to access to the mobile network via SIM cards which are ordered online and directly shipped to customers.

As such, the emissions for this product have been calculated in $kgCO_2e$ per customer connected to the mobile 3G/4G voice and data network, calculated based on the average number of felix customers connected to the mobile network for the reporting year.

3.EMISSIONS BOUNDARY

Inside the emissions boundary

All emission sources listed in the emissions boundary are part of the carbon neutral claim.

Quantified emissions have been assessed as 'attributable processes' that become the product, make the product and carry the product through its life cycle. These have been quantified in the carbon inventory.

Non-quantified emissions have been assessed as attributable and are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. All material emissions are accounted for through an uplift factor. Further detail is available at Appendix C.

Outside the emissions boundary

Non-attributable emissions have been assessed as not attributable to a product or service. They can be **optionally included** in the emissions boundary and therefore have been offset, or they can be listed as outside of the emissions boundary (and are therefore not part of the carbon neutral claim). Further detail is available at Appendix D.

Inside emissions boundary

Quantified

Network fuels (incl. well-to-tank emissions)

Network electricity (incl. transmission and distribution losses)

Data roaming to other networks by felix customers

SIM card materials and packaging

SIM card production

SIM card upstream transport

SIM card downstream freight to customers

Network construction

Network maintenance

Network decommissioning

SIM card and network warehousing

SIM card and packaging end-of-life

Non-quantified

Network water (reticulated water supply and treatment)

Network refrigerants

Initial embodied emissions in mobile phone network

Optionally included

Outside emission boundary

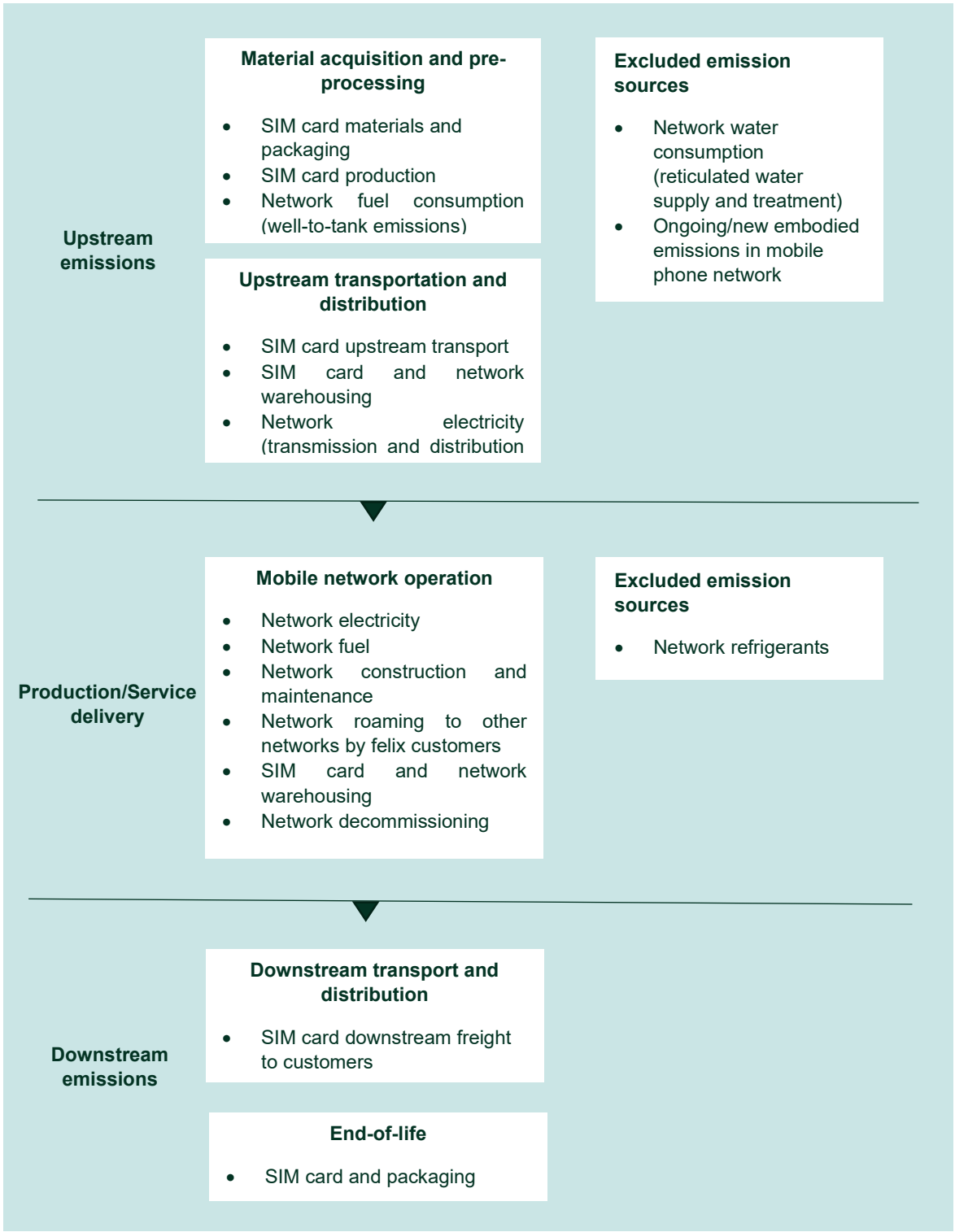
Non-attributable

Customer use of mobile handsets

Third party servers hosting websites/data accessed by felix customers

Disposal of mobile network assets

Product process diagram



Data management plan for non-quantified sources

There are no non-quantified sources in the emission boundary that require a data management plan. The initial emissions from the construction of the mobile phone network have not been quantified but repairs and replacements have been quantified through the calculation of emissions from annual network construction and maintenance. These repairs and replacements are quantified as ongoing/new embodied emissions in the mobile phone network.

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Sustainability is one of our key foundational values and we strive to operate our business in an environmentally friendly way.

The felix service is provided using the TPG Telecom mobile network, and the operation of this mobile network uses electricity which in turn generates emissions. This electricity accounts for the majority of emissions relating to the felix product.

TPG Telecom Ltd have an ongoing focus on the energy efficiency of the mobile network and undertake various initiatives to reduce energy usage:

- Over the past six years, across the mobile network, older Uninterrupted Power Supply systems have been replaced with more energy efficient equipment.
- A range of design solutions have been introduced to improve energy efficiency and reduce emissions associated with mobile base stations including free cooling measures that improve airflow circulation using low powered fans, significantly reducing the need for air conditioning. At the Dean Park base station in NSW, we have seen a 90 per cent reduction in daily air conditioning use following the upgrade.
- In partnership with ICS Industries, TPG Telecom has contributed funding to support the development of the Zonecool™ shelter - a more efficient and cost-effective base station equipment shelter solution which targets cooling to specific zones and utilises high capacity racking enabling optimal use of space for future technologies.
- Direct current power systems have also been implemented across all data centres and air conditioning chillers have been replaced with computer room air conditioning units, typically delivering an estimated 25 per cent energy saving.

In March 2021, TPG Telecom announced a commitment to power its entire operations across Australia with 100% renewable electricity by 2025 and have committed to setting a Science-based Target for reducing greenhouse gas emissions, aligned to net zero.

Whilst felix have designed our SIM cards and packaging to minimise waste, we are also developing customer journeys based on eSIM technologies (due to go live in 2022) to avoid the manufacture and transport of physical SIM cards.

5.EMISSIONS SUMMARY

Emissions over time

Emissions since base year			
		Total tCO_2-e	**Emissions intensity of the functional unit**
Base year:	FY 2018–19	510	0.051
Year 1 (projected):	FY 2020–21	1275	0.051
Year 1:	FY 2020–21	160	0.033

Significant changes in emissions

felix launched services in November 2020 and therefore submitted calculations to Climate Active for the first year of operations which were based on forecasts and estimates. Actual product emissions were lower than projected FY2020-21 emissions numbers. This is attributable to both lower emissions intensity, driven by the COVID-19 pandemic resulting in less spending on network construction and maintenance, reducing emissions, as well as a lower volume of felix customers than forecasted due to a delay in launch. Renewable electricity was also purchased for the launch of felix, resulting in zero emissions for network electricity consumption.

Emission source name	**Current year (tCO_2-e and/ or activity data)**	**Previous year (tCO_2-e and/ or activity data)**	**Detailed reason for change**
Network construction	141 tCO2e	227 tCO2e	Less network construction took place due to the COVID-19 pandemic. This was not a part of initial forecasts for FY20-21.
Network maintenance	9 tCO2e	14 tCO2e	Less network maintenance took place due to the COVID-19 pandemic. This was not a part of initial forecasts for FY20-21.
Network decommissioning	0 tCO2e	3 tCO2e	No network decommissioning occurred. This was not a part of initial forecasts for FY20-21.
Electricity	0 tCO2e	265 tCO2e	felix is a 100% renewable electricity service. As the base year calculations for FY18-19 were based upon TPG's whole operations, this did not account for the LGCs that were purchased

for felix.

Use of Climate Active carbon neutral products and services

TPG Telecom uses South Pole Australia as a primary consultant for its Climate Active submission.

Product emissions summary

Stage	Projected tCO2-e	Actual tCO2-e
Stationary combustion fuels (including well-to-tank emissions)	0.14	0.36
Network electricity (including transmission and distribution losses)	661.42	0.00
Network construction	567.36	141.11
Network maintenance	36.08	9.41
Network decommissioning	3.11	0.00
SIM card warehousing	0.29	3.17
Network warehousing	1.58	0.00
Data roaming to other networks by felix customers	1.72	0.31
SIM card materials and packaging	1.15	3.08
SIM card production	1.91	1.96
SIM card upstream transport	0.26	1.70×10^{-5}
SIM card downstream freight to customers / stores	0.07	0.07
SIM card materials and packaging end-of-life	4.31×10^{-5}	0.08
Total Net Emissions	**1,275**	**160**
Difference between projected and actual		**1,115 tCO_2-e**

Emissions intensity per functional unit (including any uplifts required)	0.033
Number of functional units to be offset (certified)	4836
Total emissions to be offset (certified)	160

6.CARBON OFFSETS

Offsets strategy

Offset purchasing strategy: Forward purchasing		
1.	Total offsets previously forward purchased and banked for this report	1,275 tCO2e
2.	Total emissions liability to offset for this report	160 tCO2e
3.	Net offset balance for this reporting period	- 1,115 tCO2e
4.	Total offsets to be forward purchased to offset the next reporting period	867 tCO2e
5.	Total offsets required for this report	160 tCO2e

Co-benefits

In total, felix has purchased 1,414 tCO2e of offsets from South Pole, consisting of 735 tCO2e from the Aak Puul Ngantam Savanna Burning Project in Cape York, Australia and 679 tCO2e from the Prony Wind Power Project in New Caledonia.

Aak Puul Ngantam Savanna Burning Project

Bounded by the Ward and Watson Rivers about 630 km northwest of Cairns, the community of Aurukun in the Western Cape York is home to over 1200 people. For tens of thousands of years, Traditional Custodians the Wik and Kugu people managed the area's savannas strategically with fire. Without this management, intensely destructive fires tear through these ecosystems in the dry season – threatening wildlife, livestock and human communities.

Operated by Indigenous-owned & directed not-for-profit Aak Puul Ngantam (APN Cape York) in partnership with Balkanu Cape York Development Corporation, the Aak Puul Ngantam Savanna Burning project comprises 370,000 hectares of land on Traditional Homelands. Project rangers implement planned 'cool' fires early in the dry season to reduce fuel loads, preventing more intense bushfires later on – thereby reducing emissions. APN Cape York have extensive skills in strategic savanna burning, with aerial and onground burning operations since 2013. The property is broken into zones, depending on how often areas need management; high traffic zones require burning every year, while others are burnt less frequently.

As well as reducing emissions by controlling and preventing large, intense and uncontrollable bushfires, the Aak Puul Ngantam Savanna Burning project employs local Indigenous people as project rangers,

engaging Wik and Kugu people in traditional practices to care for and connect with their ancestral homelands. Revenue raised from the sale of carbon credits supports a range of activities that APN Cape York runs alongside the carbon project – such as funding the installation of two communications towers to increase connectivity in the region. Rangers and others out on country can now travel knowing that they can call for assistance and keep in touch with family, even in extremely remote areas.

Below is the contribution towards the United Nations Sustainable Development Goals made by the Aak Puul Ngantam Savanna Burning Project:

View the factsheet for the Aak Puul Ngantam Savanna Burning Project:

https://a.southpole.com/public/media/302635/2635.pdf

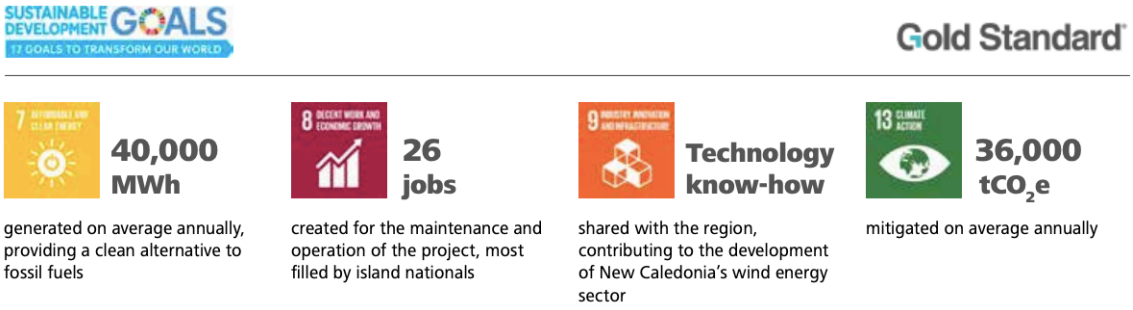
Prony Wind Power Project, New Caledonia

Islands of the Pacific Ocean like New Caledonia face serious environmental and socioeconomic pressures that are exacerbated by climate change. Pacific Island nations are already severely affected by extreme weather and climate variability, and their inhabitants are amongst the world's most vulnerable communities to the growing effects of climate change. Yet in New Caledonia, 80 percent of energy demands are met by fossil fuel power plants.

Prony Wind Power involves six wind farms located at two different sites on the island of New Caledonia that supply electricity to the local grid. The Kafeate and Prony sites consist of 116 wind turbines with a total capacity of 31 MW, with an estimated yearly production of 40 GWh of emissions-free, renewable electricity

By displacing greenhouse gas emissions from fossil fuel power plants with renewable electricity, Prony Wind Power contributes to global climate action. The project has also boosted local economies, creating employment in both the construction and operational phases and spreading technological know-how. Prony's success is a tribute the viability and value of sustainable development in small island nations, promoting climate awareness and action, and ultimately increasing climate resilience in the Pacific Island region.

Below is the contribution towards the United Nations Sustainable Development Goals made by the Prony Wind Power Project:



View the factsheet for the Prony Wind Power Project:

https://a.southpole.com/public/media/300344/0344.pdf

See guidance on page 69.

Offsets summary

Proof of cancellation of offset units

Offsets cancelled for Climate Active Carbon Neutral Certification										
Project description	**Type of offset units**	**Registry**	**Date retired**	**Serial number (and hyperlink to registry transaction record)**	**Vintage**	**Eligible Quantity (tCO_2-e)**	**Quantity used for previous reporting periods**	**Quantity banked for future reporting periods**	**Quantity used for this reporting period claim**	**Percentage of total (%)**
"Aak Puul Ngantam" Savanna Burning Project	ACCU	ANREU	Jun 24, 2020	3,799,428,512 - 3,799,429,226 [a]	2019-20	715	148 [b]	484	83	51.9
"Aak Puul Ngantam" Savanna Burning Project	ACCU	ANREU	Jun 24, 2020	3,799,440,627 - 3,799,440,646 [a]	2019-20	20	10 [b]	0	10	6.3
Prony and Kafeate wind-farms, New Caledonia	VER	GS Registry	Jun 30, 2020	GS1-1-NC-GS566-12-2014-5968-9332-10010	2014	679	230 [b]	382	67	41.9
Total offsets retired this report and used in this report									160	
Total offsets retired this report and banked for future reports								867		

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Australian Carbon Credit Units (ACCUs)	93	58.1
Verified Emissions Reductions (VERs)	67	41.9

[a] A hyperlink to the ANREU registry transaction record is unable to be provided. Evidence of the offset retirement has been provided to Climate Active.

[b] 388 credits have been used for the felix Climate Active service certification FY20-21 report.

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

The following RECs have been surrendered to reduce electricity emissions under the market-based reporting method.

1. Large-scale Generation certificates (LGCs)*	132
2. Other RECs	0

* LGCs in this table only include those surrendered voluntarily (including through PPA arrangements), and does not include those surrendered in relation to the LRET, GreenPower, and jurisdictional renewables.

Project supported by LGC purchase	Eligible units	Registry	Surrender date	Accreditation code (LGCs)	Certificate serial number	Generation year	Quantity (MWh)	Fuel source	Location
HJ Langdon Commercial Solar	LGC	REC Registry	4 September 2020	SRPVVCD5	0000018818-SRPVVCD5-2020-0000267 to 000018818-SRPVVCD5-2020-0000420	2020	46	Solar	Derrimut, Victoria, Australia
Tibaldi Meats Commercial Solar	LGC	REC Registry	4 September 2020	SRPVVCJ9	000018818-SRPVVCJ9-2020-0000001 to 000018818-SRPVVCJ9-2020-0000288	2020	86	Solar	Clayton, Victoria, Australia
					Total LGCs surrendered this report and used in this report		132		

APPENDIX A: ADDITIONAL INFORMATION

N/A

APPENDIX B: ELECTRICITY SUMMARY

Electricity emissions are calculated using a **market-based approach**.

The location-based method provides a picture of a business's electricity emissions in the context of its location, and the emissions intensity of the electricity grid it relies on. It reflects the average emissions intensity of the electricity grid in the location (State) in which energy consumption occurs. The location-based method does not allow for any claims of renewable electricity from grid-imported electricity usage.

Market-based approach summary

Market-based approach	Activity data (kWh)	Emissions (kgCO2-e)	Renewable % of total
Behind the meter consumption of electricity generated	0	0	0%
Total non-grid electricity	**0**	**0**	**0%**
LGC purchased and retired (kWh) (including PPAs & Precinct LGCs)	131,456	0	80%
GreenPower	0	0	0%
Jurisdictional renewables (LGCs retired)	2,090	0	1%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	488	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	30,685	0	19%
Residual electricity	0	0	0%
Total grid electricity	**164,718**	**0**	**100%**
Total electricity consumed (grid + non grid)	**164,718**	**0**	**100%**
Electricity renewables	164,718	0	
Residual electricity	0	0	
Exported on-site generated electricity	**0**	**0**	
Emission footprint ($kgCO_2$-e)		0	

Total renewables (grid and non-grid)	100.00%
Mandatory	20.19%
Voluntary	79.81%
Behind the meter	0.00%
Residual electricity emission footprint (tCO_2-e)	**0**

Figures may not sum due to rounding. Renewable percentage can be above 100%

Location-based approach summary

Location-based approach	Activity data (kWh)	Emissions ($kgCO_2$-e)
ACT	2,578	2,320
NSW	52,106	46,895
SA	30,912	16,074
Vic	6,644	7,242
Qld	3,981	3,703
NT	17,759	12,254
WA	35,494	24,846

Tas	15,244	2,592
Grid electricity (scope 2 and 3)	**164,718**	**115,925**
ACT	0	0
NSW	0	0
SA	0	0
Vic	0	0
Qld	0	0
NT	0	0
WA	0	0
Tas	0	0
Non-grid electricity (behind the meter)	**0**	**0**
Total electricity consumed	**164,718**	**115,925**
Emission footprint (tCO_2-e)	**116**	

Climate Active carbon neutral electricity summary

Carbon neutral electricity offset by Climate Active product	Activity data (kWh)	Emissions ($kgCO_2$-e)
N/A	**0**	**0**

Climate Active carbon neutral electricity is not considered renewable electricity. The emissions have been offset by another Climate Active carbon neutral product certification.

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

The following sources emissions have been assessed as attributable, are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. These emissions are accounted for through an uplift factor. They have been non-quantified due to one of the following reasons:

1. **Immaterial** <1% for individual items and no more than 5% collectively
2. **Cost effective** Quantification is not cost effective relative to the size of the emission but uplift applied.
3. **Data unavailable** Data is unavailable but uplift applied. A data management plan must be put in place to provide data within 5 years.
4. **Maintenance** Initial emissions non-quantified but repairs and replacements quantified.

Relevant-non-quantified emission sources	(1) Immaterial	(2) Cost effective (but uplift applied)	(3) Data unavailable (but uplift applied & data plan in place)	(4) Maintenance
Initial embodied emissions in mobile phone network	Yes	No	No	Yes

Excluded emission sources

Attributable emissions sources can be excluded from the carbon inventory, but still considered as part of the emissions boundary if they meet **all three of the below criteria**. An uplift factor may not necessarily be applied.

1. A data gap exists because primary or secondary data cannot be collected **(no actual data).**
2. Extrapolated and proxy data cannot be determined to fill the data gap (**no projected data**).
3. An estimation determines the emissions from the process to be **immaterial**).

	No actual data	No projected data	Immaterial
Network refrigerants	Yes	Yes	Yes
Network water (reticulated supply and treatment)	Yes	Yes	Yes

APPENDIX D: OUTSIDE EMISSION BOUNDARY

Non-attributable emissions have been assessed as not attributable to a product or service (do not carry, make or become the product/service) and are therefore not part of the carbon neutral claim. To be deemed attributable, an emission must meet two of the five relevance criteria. Emissions which only meet one condition of the relevance test can be assessed as non-attributable and therefore are outside the carbon neutral claim. Non-attributable emissions are detailed below.

Relevance test					
Non-attributable emission	*The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions*	*The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.*	*Key stakeholders deem the emissions from a particular source are relevant.*	*The responsible entity has the potential to influence the reduction of emissions from a particular source.*	*The emissions are from outsourced activities previously undertaken within the organisation's boundary, or from outsourced activities typically undertaken within the boundary for comparable organisations.*
Customer use of mobile handsets	No	No	No	No	No
Third party servers hosting websites/data accessed by felix customers	No	No	No	No	No
Disposal of mobile network assets	No	No	No	No	No

An Australian Government Initiative

Climate Active