Queensland Government

QUEENSLAND TREASURY

Queensland Government Statistician's Office

Surat Basin population report, 2024

Introduction

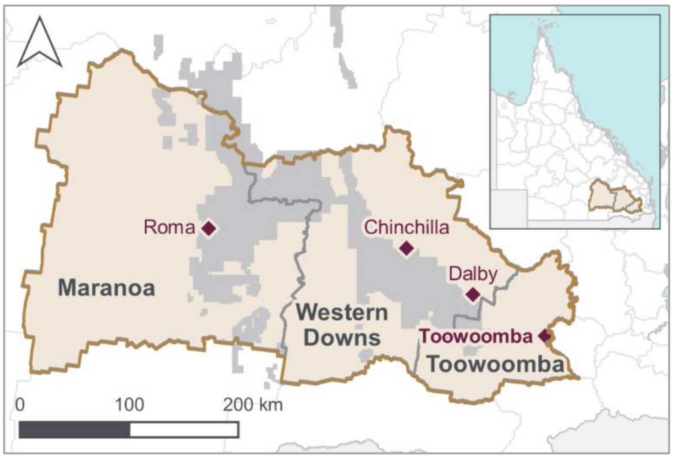
The resource sector in regional Queensland utilises fly-in/fly-out and drive-in/drive-out (FIFO/DIDO) workers as a source of labour supply. These non-resident workers live in regional areas while on-shift. The Australian Bureau of Statistics' (ABS) resident population estimates for these areas do not include non-resident workers.

The non-resident population represents the number of FIFO/DIDO workers who are on-shift in the region at a given point in time. This group includes those employed in construction, production, and maintenance at mining and gas industry operations, related infrastructure operations and renewable energy projects.

This report provides non–resident population estimates for the Surat Basin during the last week of June 2024. It also includes full–time equivalent (FTE) population estimates, which aggregate the resident and non-resident populations to provide a more complete indicator of demand for certain services.

Estimates within this report are primarily derived from the annual Survey of Accommodation Providers conducted by the Queensland Government Statistician's Office (QGSO). The survey includes worker accommodation villages (WAVs), hotels, motels and caravan parks.

Figure 1 Surat Basin region



The Surat Basin – at a glance

The Surat Basin (Figure 1) is a major energy region, based on coal seam gas production, thermal coal mining and electricity generation. The region comprises the local government areas (LGAs) of Maranoa, Western Downs and Toowoomba.

Estimated population at June 2024:

Non-resident population 3,645

Resident population 233,820

Full–time equivalent population......................... 237,465

Key findings

Key findings of this report include:

- The Surat Basin had an estimated non-resident population of 3,645 persons in June 2024, around 110 persons (or –3%) lower than in June 2023.
- Overall change in the region's non-resident population in 2023–24 was due largely to reduced numbers of non-resident workers on-shift in Maranoa, as gas industry activity moderated from unusually high levels in June 2023. This decrease more than outweighed non-resident population growth in Western Downs, which was driven by increased construction activity at CSG and renewable energy projects.
- At the LGA level, Western Downs had a non-resident population of 2,260 persons (or 62% of the regional total) in June 2024. Maranoa (1,205 persons or 33%) and Toowoomba (180 persons or 5%) made up the balance.
- In 2023–24, the non-resident population increased in Western Downs (+130 persons or +6%). FIFO/DIDO numbers in Maranoa decreased over this period (–235 persons or –16%), while numbers in Toowoomba were unchanged.
- The Surat Basin's full–time equivalent (FTE) population was estimated at 237,465 persons in June 2024, comprising 233,820 residents and 3,645 non-resident workers on-shift. Non-resident workers on-shift made up less than 2% of the region's FTE population.
- In June 2024, around three-quarters of non-resident workers in the Surat Basin stayed in WAVs while on-shift (2,695 persons or 74%). The remainder (950 persons or 26%) stayed in other accommodation such as hotels/motels and caravan parks.
- More than half of the Surat Basin's non-resident population in June 2024 was counted in town (1,895 persons or 52%) rather than in rural areas. In Maranoa, most stayed in rural areas (975 persons or 81%), while in Western Downs, most stayed in town (1,485 persons or 66%).
- The proportion of vacant and available hotel/motel rooms in the region fell to 22% in June 2024, from 27% in June 2023.

Surat Basin update, 2023–24

The Surat Basin (Figure 3) in southern Queensland is a major energy region and the state's main source of CSG production. CSG activity continues to provide most of the region's resource employment, with three large CSG to liquefied natural gas (LNG) projects and smaller gas companies engaged in operations and development. Coal mines, power stations and renewable energy projects also contribute to resource industry activity in the region (Table 5).

In 2023–24:

- **Australia Pacific LNG (APLNG)** reported an increase of 3% in annual production, with ongoing benefits from effective well and field optimisation activities and fewer scheduled maintenance disruptions (Origin, 2024). Strong field performance enabled deferral of exploration and drilling activities.
- **Santos Gladstone LNG (GLNG)** reported continued growth in production from upstream fields in the first half of 2024 (Santos, 2024). Production at Scotia field in Western Downs continued to exceed expectations, while operational efficiencies delivered increased production and lower operating costs at Roma field.
- **Queensland Curtis LNG (QCLNG)** commenced work in May 2024 on a new set of onshore natural gas wells to supply domestic and export customers, with approximately 138 newly planned gas wells to be drilled and connected in the Western Downs region (Shell plc, 2024).

In June 2024, **Senex Energy** announced plans to proceed with a more than A$1 billion expansion of its Atlas and Roma North gas developments, after receiving Commonwealth approval for the Atlas Stage 3 Gas Project and Atlas to Reedy Creek Pipeline (DCCEEW, 2024a; DCCEEW, 2024b; Senex, 2024). The Atlas Stage 3 Gas Project southwest of Wandoan (Figure 3) will include up to 151 coal seam gas wells and related infrastructure, with the 57km Atlas to Reedy Creek Pipeline to transport natural gas from the Atlas field to the Reedy Creek to Wallumbilla Pipeline.

In 2023–24, **Arrow Energy** continued to develop the Surat Gas Project South area near Dalby, with 250 wells in production by June 2024 (Arrow Energy, 2024). **ADZ Energy** and **Denison** also maintained their gas operations in the Surat Basin (ADZ, 2024; Denison, 2024).

In Western Downs, renewable energy project activity continued in 2023–24:

- During the year, works continued on Stage One of **Wambo Wind Farm**, comprising 42 wind turbines (Wambo Wind Farm, 2024). Construction of Stage Two, contributing an additional 41 wind turbines, began in the first half of 2024.
- Smaller projects under construction in June 2024 included **Kogan Clean Energy Hub, Ulinda Park BESS** and **Western Downs Battery** (CS Energy, 2024; Akaysha Energy, 2024a, 2024b; Neoen, 2024a, 2024b).
- Several renewable energy projects in Western Downs, which were underway in 2023, were operational by mid-2024: **Blue Grass Solar Farm**, **Columboola Solar Farm**, **Dalby Hybrid Power Plant**, **Dulacca Wind Farm**, **Edenvale Solar Park**, **Wandoan South Solar Project** and **Western Downs Green Power Hub** (AEMO, 2024; FRV, 2024; QGSO, 2023).

In the Surat Basin in 2023–24, **New Acland mine** produced, railed and sold its first coal following the restart of operations (New Hope Group, 2024a). Production from **Wilkie Creek mine** was suspended in January 2024 following the appointment of receivers and managers (New Hope Group, 2024b).

Overall, the Surat Basin's non-resident population fell in 2023–24, with high levels of gas industry activity in Maranoa in June 2023 moderating by June 2024. In Western Downs, gas operations were relatively stable, with CSG project construction and wind farm construction driving the increase in the non-resident population over this period.

Non-resident population

The non-resident population of the Surat Basin was estimated at 3,645 persons at the end of June 2024, around 110 persons (or –3%) lower than in June 2023 (Table 1).

Most of the region's non-resident population in June 2024 was in Western Downs (2,260 persons or 62%). One-third was in Maranoa (1,205 persons or 33%), with the remainder in Toowoomba (180 persons or 5%).

The non-resident population of Maranoa declined by 235 persons (–16%) in 2023–24, as gas industry activity moderated from unusually high levels in June 2023. In Western Downs, the non-resident population increased by 130 persons (+6%), due to CSG project and wind farm construction. The non-resident population of Toowoomba remained stable at 180 persons.

Non-resident population

The non-resident population is the number of fly-in/fly-out or drive-in/drive-out (FIFO/DIDO) workers who are living in the area of their workplace temporarily, and who have their usual place of residence elsewhere.

Due to shift arrangements, not all members of the non-resident workforce are present in the local area at one time. For that reason, the non-resident population refers to the number of non-resident workers on-shift at a given point in time, rather than the total non-resident workforce.

Compared with the other Surat Basin LGAs, Toowoomba has a much smaller non-resident population, which in June 2024 largely comprised workers associated with the gas industry, coal mining, and power station operations.

Table 1 Non-resident population, Surat Basin LGAs, as at June

	2023	2024	Change, 2023 to 2024	
LGA	— persons —		persons	%
Maranoa	1,445	1,205	–235	–16
Toowoomba	180	180	0	0
Western Downs	2,130	2,260	130	6
SURAT BASIN TOTAL	**3,755**	**3,645**	**–110**	**–3**

Figures in tables in this report have been rounded to the nearest five; see Notes at end of report for details.

Source: QGSO estimates

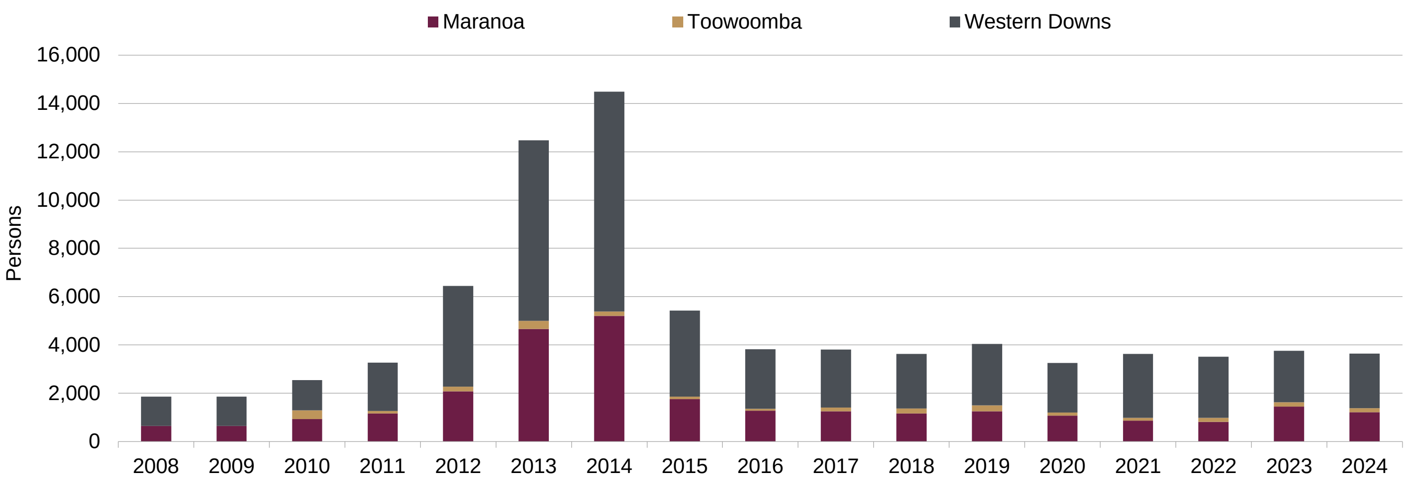
As Figure 2 shows, the non-resident population of the Surat Basin grew from 1,855 persons in 2008 to reach a peak of 14,490 persons in 2014, before declining to 5,425 persons in 2015. This steep increase and rapid decline reflect the presence of large, temporary FIFO/DIDO workforces engaged in the construction of major infrastructure for three large CSG projects, and the subsequent transition from the construction to production phase.

Since 2016, the number of non-resident workers on-shift in the Surat Basin has remained comparatively stable, at between 3,260 and 4,040 persons. Over this time, the region's baseline non-resident population has largely comprised the ongoing production, drilling and routine maintenance workforces of the major CSG projects. Construction of additional gas gathering infrastructure, gas expansion projects, and major maintenance events have also added to the number of non-resident workers on-shift in some years. Workers associated with smaller gas companies and other activities including renewable energy project construction, power station maintenance, coal mining, road and rail works have also contributed to the non-resident population since 2016. In particular, workers engaged in solar and wind farm construction in Western Downs have made a sizeable contribution to the region's non-resident population since 2021.

The small decline in the Surat Basin's non-resident population in the year to June 2024 was due to different factors in the LGAs of Maranoa and Western Downs. In Maranoa, the non-resident population fell over the year to June 2024 following unusually high levels of gas industry activity in June 2023, when expanded drilling, well connections and large-scale maintenance works supplemented ongoing production, drilling and routine maintenance activity.

In Western Downs, non-resident population growth in 2023–24 was due to increased construction activity at CSG and renewable energy projects, while ongoing gas operations remained relatively stable. Several renewable energy projects that were in the testing and commissioning phase in June 2023 had transitioned to operations by June 2024. Renewable energy construction activity in June 2024 was boosted by increased numbers at Wambo Wind Farm as construction work ramped up, as well as small numbers of workers at battery storage projects.

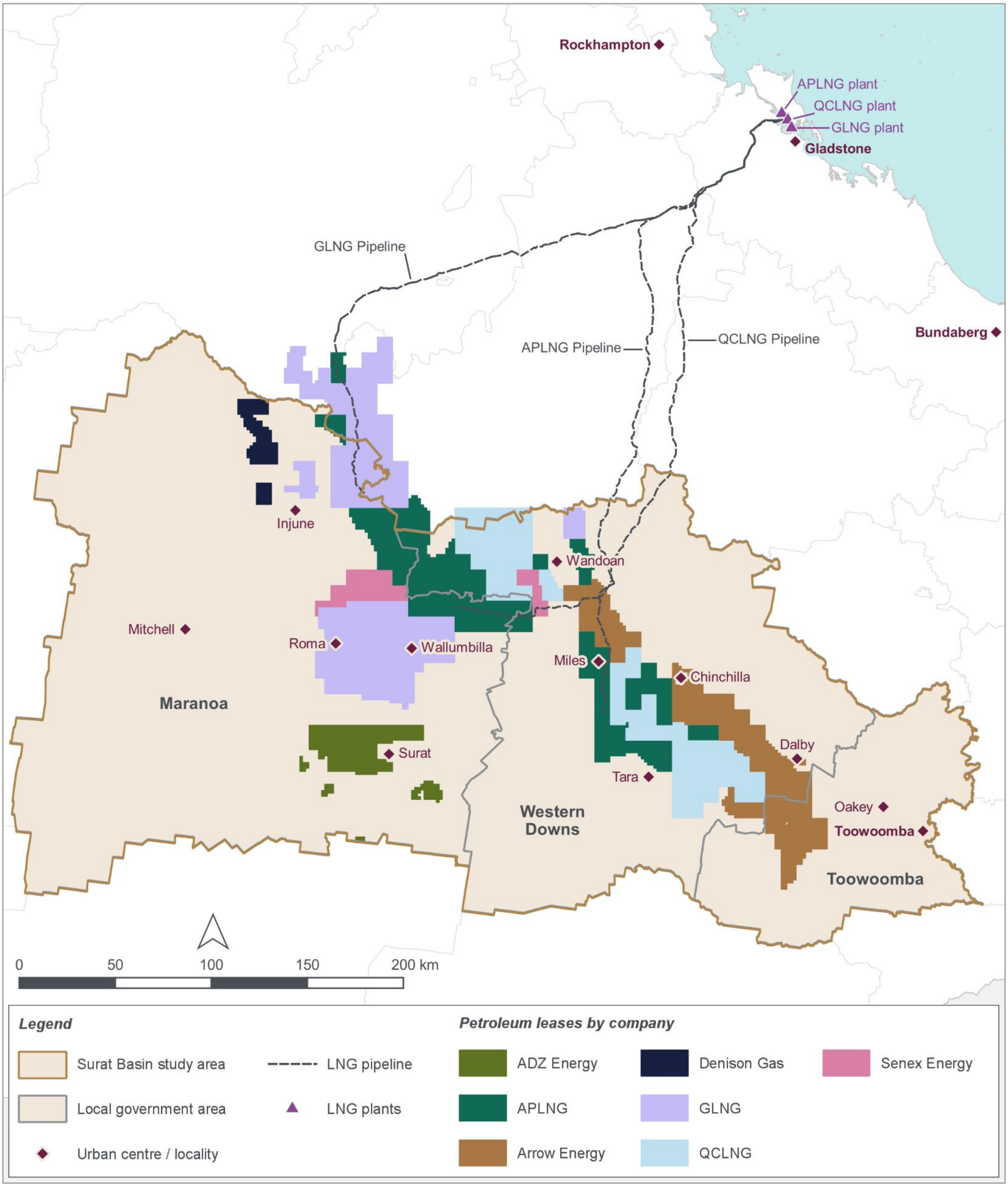
Figure 2 Non-resident population, Surat Basin LGAs, as at June



Note: Estimates for 2008 do not include Toowoomba LGA. Data for the Surat Basin were not collected in 2009 and estimates are extrapolated from 2008 data.

Source: QGSO estimates

Figure 3 Petroleum leases by company(a), Surat Basin



(a) Includes petroleum lease (PL) applications and PLs granted as at June 2024. Does not include PLs held by other companies.
Source: Queensland Government, 2024; QGSO, 2024

Full–time equivalent (FTE) population

In June 2024, the Surat Basin had an estimated FTE population of 237,465 persons, comprising 233,820 residents and 3,645 non-resident workers on-shift (Table 2). Non-resident workers on-shift represented less than 2% of the region's FTE population.

At the LGA level, Toowoomba had the region's largest FTE population in June 2024 (185,280 persons), though the non-resident component comprised less than 1% of the FTE. Non-resident workers on-shift accounted for 6% of Western Down's FTE population of 37,575 persons and 8% of Maranoa's FTE population of 14,610 persons.

Full–time equivalent population

The FTE population measure is the sum of the resident population (people who live in the area permanently) and the non-resident population (i.e., the number of non-resident workers on-shift).

The FTE population measure provides a more complete estimate of total demand for certain services and infrastructure in regions with a high incidence of FIFO/DIDO workers.

Table 2 FTE population estimates, Surat Basin LGAs and selected UCLs, June 2024

			Resident population(b)	**Non-resident population**	**FTE population**
LGA	Location(a)	UCL		— persons —	
Maranoa	In town	Injune	325	20	345
		Roma	6,820	165	6,985
		Other towns(c)	1,580	45	1,625
	Rural areas		4,680	975	5,655
Maranoa total			***13,405***	***1,205***	***14,610***
Toowoomba	In town	Millmerran	1,425	40	1,470
		Toowoomba	114,810	105	114,915
		Other towns(c)	43,155	30	43,185
	Rural areas		25,715	0	25,715
Toowoomba total			***185,105***	***180***	***185,280***
Western Downs	In town	Chinchilla	6,480	590	7,075
		Dalby	12,670	385	13,055
		Jandowae	770	85	855
		Miles	1,355	165	1,520
		Wandoan	485	240	720
		Other towns(c)	965	20	985
	Rural areas		12,585	775	13,360
Western Downs total			***35,310***	***2,260***	***37,575***
SURAT BASIN TOTAL			**233,820**	**3,645**	**237,465**

(a) Refer to Notes at end of report for explanation of 'in town' and 'rural areas'.

(b) QGSO unpublished data – provisional and subject to revision.

(c) UCLs with only one accommodation provider or fewer than 20 non-resident workers are aggregated in 'Other towns'.

Source: QGSO estimates

Non–resident population distribution

In June 2024, more than half of the Surat Basin's non-resident population was counted in towns (1,895 persons or 52%), with the balance in rural areas (1,750 persons or 48%) (Table 2). This distribution varied across the three LGAs. In Maranoa, non-resident workers on-shift were predominantly counted in rural areas (975 persons or 81%), while in Western Downs, most stayed in town (1,485 persons or 66%). All non-resident workers on-shift in Toowoomba were counted in town (180 persons).

Several urban centres and localities (UCLs) in the Surat Basin housed non-resident workers on-shift in June 2024 (Table 2). Three UCLs in Western Downs had non-resident populations of 200 or more—Chinchilla (590 persons), Dalby (385 persons) and Wandoan (240 persons). In Maranoa, the UCL of Roma (165 persons) had the largest number of non-resident workers on-shift.

Since the transition from CSG construction to production, non-resident population change and distribution in the LGAs of Maranoa and Western Downs have been shaped by different influences.

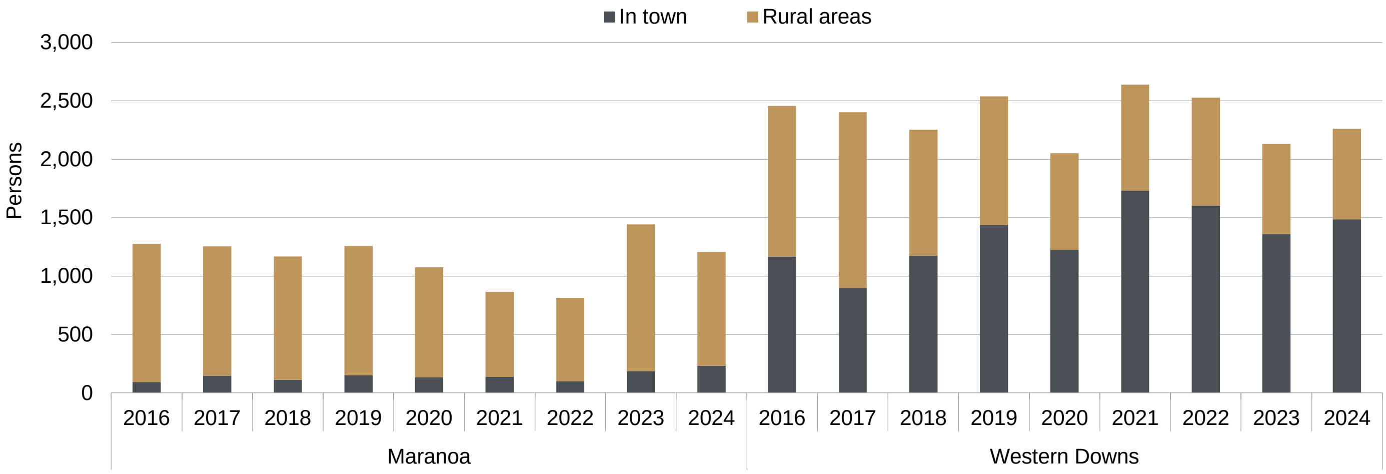
Resource activity in Maranoa is primarily associated with the CSG industry, with most of the non-resident population engaged in CSG operations, gas gathering, drilling and maintenance activities. Since 2016, the majority of non-resident workers on-shift in Maranoa have stayed in rural areas due to the comparatively remote location of most gas industry activity in the LGA, with smaller numbers counted in town (Figure 4).

In Western Downs, in addition to ongoing CSG activity, the non-resident population reflects a broader range of influences including renewable energy projects, coal mining and power station operations. The relative proximity of CSG operations and developments and other resource projects to population centres in Western Downs has enabled greater use of in-town accommodation by non-resident workers.

As Figure 4 shows, the non-resident population of Maranoa declined overall between 2016 (1,280 persons) and 2022 (815 persons), as the number of gas workers reduced. Unusually high levels of gas industry activity saw the non-resident population increase substantially to reach 1,445 persons in June 2023. Although numbers reduced over the year to June 2024 (1,205 persons), they were higher than recorded in 2021 and 2022. While most non-resident workers in Maranoa in June 2024 stayed in rural areas (975 persons), a sizeable number of gas and other workers stayed in accommodation in town (230 persons).

Western Downs' non-resident population has ranged from 2,055 persons (June 2020) to 2,640 persons (June 2021) over the period since 2016. Annual fluctuations largely reflect the influence of CSG development and renewable energy construction activities. Recently, the non-resident population in town in Western Downs grew from 1,360 persons in June 2023 to 1,485 persons in June 2024, driven by an increased number of construction workers at CSG and wind farm projects. The number of non-resident workers on-shift in rural areas of Western Downs remained almost unchanged between June 2023 (770 persons) and June 2024 (775 persons), and largely comprised CSG operations workers.

Figure 4 Non-resident population by location[(a)], Maranoa and Western Downs LGAs, as at June



(a) Refer to Notes at end of report for explanation of 'in town' and 'rural areas'.

Source: QGSO estimates

Non–resident worker accommodation

WAVs are the main accommodation type used in the Surat Basin, accounting for around three-quarters of the non-resident workers on-shift in the region in June 2024 (2,695 persons or 74%) (Table 3). The balance of the non-resident population (950 persons or 26%) stayed in other accommodation such as hotels/motels and caravan parks.

The number of non-resident workers on-shift counted in WAVs in the Surat Basin decreased by 190 persons between June 2023 and June 2024, while numbers in other accommodation grew by 80 persons.

At the LGA level, Maranoa recorded a comparatively large decline in the number of non-resident workers on-shift in WAVs in 2023–24 (–270 persons), which offset a small increase in other accommodation (+30 persons). Decreased WAV usage was associated with reduced numbers of gas industry workers following unusually high numbers of workers in June 2023.

Worker accommodation villages (WAVs)

WAVs are commonly used to house non-resident workers on-shift. WAVs typically consist of demountable dwellings arranged in a village, with common dining, laundry and recreational facilities.

In Western Downs, the non-resident population increased in both WAVs (+80 persons) and other accommodation (+55 persons) in the year to June 2024, largely due to CSG project construction and expanded numbers of wind farm construction workers.

Table 3 Non-resident population by accommodation type, Surat Basin LGAs, as at June

	WAVs	Other[(a)]	Total	WAVs	Other[(a)]	Total
	2024			Change, 2023–24		
LGA	— persons —					
Maranoa	1,005	205	1,205	–270	30	–235
Toowoomba[(b)]	0	180	180	0	0	0
Western Downs	1,690	570	2,260	80	55	130
SURAT BASIN TOTAL	**2,695**	**950**	**3,645**	**–190**	**80**	**–110**

(a) 'Other' includes hotels/motels, caravan parks and other accommodation. Refer to Notes at end of report for additional information.

(b) There were no WAVs located in Toowoomba in June 2023 or June 2024.

Source: QGSO estimates

The proportion of vacant and available hotel/motel rooms in the Surat Basin in June 2024 was 22%, lower than in June 2023 (27%) and June 2022 (24%) (Table 4).

At the LGA level, Maranoa recorded a larger proportion of vacant and available hotel/motel rooms in June 2024 (22%) than in June 2023 (15%), despite increased usage by resource industry workers.

In contrast, availability in Western Downs fell from 29% in June 2023 to 20% in June 2024, due to demand from the resources sector and other guests. The LGA of Toowoomba also recorded a decline in the proportion of hotel/motel rooms that were vacant and available from 30% in June 2023 to 23% in June 2024. The LGA of Toowoomba attracts a broader range of guests than Maranoa and Western Downs, reflecting the role of Toowoomba city as a major regional centre.

Table 4 Vacant and available hotel/motel rooms, Surat Basin LGAs, as at June

	Occupied by non-resident workers	Vacant and available[(a)]	Balance[(a)]	Total hotel/motel rooms[(a)]	Vacant and available hotel/motel rooms		
	2024				2022	2023	2024
LGA	— rooms —				— % —		
Maranoa	160	145	340	645	21	15	22
Toowoomba	100	440	1,335	1,875	21	30	23
Western Downs	380	240	545	1,165	31	29	20
SURAT BASIN TOTAL	**645**	**820**	**2,220**	**3,685**	**24**	**27**	**22**

(a) Refer to Notes at end of report for explanation of 'vacant and available' and 'balance'.

Source: QGSO estimates

Table 5 Existing resource operations and projects under construction[(a)], Surat Basin, June 2024

Category	Operation / project name	Company name	LGA
CSG	APLNG Operations and Development	APLNG[(b)]	Maranoa, Western Downs
CSG	Arrow Energy Surat Operations	Arrow Energy	Toowoomba, Western Downs
CSG	Atlas	Senex Energy	Western Downs
RI	Braemar Power Station	Alinta Energy	Western Downs
RI	Braemar 2 Power Station	Arrow Energy	Western Downs
CM	Cameby Downs Mine	Yancoal Australia	Western Downs
CM	Commodore Mine	Millmerran Power Partners	Toowoomba
RI	Condamine Power Station	QGC	Western Downs
RI	Darling Downs Power Station	Origin Energy	Western Downs
CSG	Denison South (Yellowbank)	Denison Gas	Maranoa
CSG	GLNG Operations and Development	GLNG[(c)]	Maranoa, Western Downs
CSG	Kincora Project	ADZ Energy	Maranoa
RE	Kogan Clean Energy Hub	CS Energy	Western Downs
CM	Kogan Creek Mine	CS Energy	Western Downs
RI	Kogan Creek Power Station	CS Energy	Western Downs
RI	Millmerran Power Station	Genuity	Toowoomba
CM	New Acland Mine	New Hope Group	Toowoomba
RI	Oakey Power Station	Shell Energy	Toowoomba
CSG	QCLNG Operations and Development	QCLNG[(d)]	Western Downs
CSG	Roma North	Senex Energy	Maranoa
RI	Roma Power Station	Origin Energy	Maranoa
CSG	Surat Gas Project	Arrow Energy	Toowoomba, Western Downs
RE	Ulinda Park BESS	Akaysha Energy	Western Downs
RE	Wambo Wind Farm	Cubico Sustainable Investments / Stanwell	Western Downs
RE	Western Downs Battery	Neoen	Western Downs

CM = coal mine CSG = coal seam / conventional gas RE = renewable energy RI = related infrastructure

(a) Includes gas operations, coal mining operations, resource industry-related infrastructure, and projects under construction as at June 2024. Operations that have ceased production or were in care and maintenance, including Wilkie Creek mine in Western Downs, are not included in this list.

(b) Australia Pacific LNG (APLNG) is a joint venture between Origin Energy, ConocoPhillips and Sinopec.

(c) Santos Gladstone LNG (GLNG) is a joint venture between Santos, PETRONAS, Total and KOGAS.

(d) Queensland Curtis LNG (QCLNG) is a joint venture between QGC, CNOOC and MidOcean Energy.

Source: QGSO 2024

Notes

LGA – local government area   UCL – urban centre and locality

Place names refer to local government areas unless otherwise specified.

Data in this report are derived from surveys conducted by QGSO in 2024 and other sources. The Survey of Accommodation Providers counted non-resident workers staying in worker accommodation villages (WAVs), hotels/motels, caravan parks and other commercial accommodation during the last week of June 2024. Short-term and overnight visitors are not regarded as non-resident workers. The Resource Employment Survey collected workforce information from all resource companies with existing operations and projects in the Surat Basin as at June 2024.

Non-resident workers are people who fly-in/fly-out or drive-in/drive-out (FIFO/DIDO) to work and live in the area temporarily while rostered on, and who have their usual place of residence elsewhere. This group includes employees, contractors and associated sub-contractors employed in construction, production, and maintenance at mining and gas industry operations and projects, renewable energy projects and resource related infrastructure. Figures in this report refer to the number of non-resident workers on-shift or present in the area at a given point in time and should not be confused with total non–resident workforce numbers.

Non–resident population data presented in this report are a point-in-time measure, based on the best information available at the time of the surveys. Non–resident worker numbers may vary in response to changing production demands, prevailing weather and industrial disputes. At the time of the 2024 surveys, the number of non-resident workers on-shift in the Surat Basin was unaffected by widespread adverse weather events or industrial action.

Resident population estimates for 2024 are unpublished QGSO estimates, which are provisional and subject to revision.

'In town' includes populations counted in defined urban centres and localities (UCLs), as well as non-resident workers housed within 5km of town. 'Rural areas' include populations outside of defined UCLs, including non-resident workers more than 5km from town.

'Other' accommodation includes hotels, motels, caravan parks and other private rental accommodation.

'Vacant and available' refers to hotel/motel rooms that were not occupied by non-resident workers or other guests and were vacant and available on the night of the survey. 'Balance' includes hotel/motel rooms occupied by other guests, rooms that were not occupied but held for non-resident workers under permanent booking arrangements, or rooms unavailable for other reasons.

Figures in tables have been rounded to the nearest five. As a result of rounding, discrepancies may occur between sums of the component items and totals. Percentages and other calculations are made prior to rounding of figures and discrepancies might therefore exist between these calculations and those that could be derived from the rounded figures.

References

ADZ Energy (2024) *Projects – Surat Basin*, accessed 6 November 2024 https://adzenergy.com.au/project-overview/surat-basin/

Australian Energy Market Operator (AEMO) (2024) *NEM Generation information publications – July 2024 Generation Information*, 24 July 2024 (archived) https://www.aemo.com.au/energy-systems/electricity/national-electricity-market-nem/nem-forecasting-and-planning/forecasting-and-planning-data/generation-information

Akaysha Energy (2024a) *Ulinda Park BESS*, accessed 6 November 2024 https://akayshaenergy.com/projects/ulinda-park-bess

Akaysha Energy (2024b) 'Ulinda Park, QLD begins', X post, 18 May, accessed 6 November 2024 https://x.com/Akaysha_energy/status/1791716608890810705

Arrow Energy (2024) *Surat Gas Project South*, accessed 6 November 2024 https://www.arrowenergy.com.au/what-we-do/Surat-Gas-Project/sgp-south

CS Energy (2024) *Clean Energy Hubs – Kogan Clean Energy Hub*, accessed 6 November 2024 https://www.csenergy.com.au/what-we-do/clean-energy-hubs

Denison (2024) *Production Projects – Denison South*, accessed 6 November 2024 https://denisongas.com.au/operations/denison-south/

Department of Climate Change, Energy, the Environment and Water (DCCEEW) (2024a) *Atlas Stage 3 Gas Project*, accessed 6 November 2024 https://epbcpublicportal.environment.gov.au/all-referrals/project-referral-summary/?id=19a5af33-1966-ed11-9561-00224818aa41

Department of Climate Change, Energy, the Environment and Water (DCCEEW) (2024b) *Atlas to Reedy Creek Pipeline*, accessed 6 November 2024 https://epbcpublicportal.environment.gov.au/all-referrals/project-referral-summary/?id=c79af500-f20f-ee11-8f6d-000d3a794100

FRV (2024) *FRV Australia's first hybrid PV-Battery Storage project is operative*, 3 July 2024 https://frv.com/en/frv-australias-first-hybrid-pv-battery-storage-project-is-operative/

Neoen (2024a) 'Congratulations to all on the successful energisation of the substation for our 270 MW / 540 MWh Western Downs Battery last week….', Linkedin post, 5 June, accessed 6 November 2024 https://www.linkedin.com/posts/neoen-australia_bigbattery-10gwby2030-activity-7203928686226464768-yslr

Neoen (2024b) *Neoen to build Stage 2 of Western Downs Battery after signing a 200 MW virtual battery contract with AGL Energy*, 27 August 2024 https://neoen.com/en/news/2024/neoen-to-build-stage-2-of-western-downs-battery-after-signing-a-200-mw-virtual-battery-contract-with-agl-energy/

New Hope Group (2024a) *2024 Full Year Results Year ended 31 July 2024*, 17 September 2024 https://newhopegroup.com.au/wp-content/uploads/2024/09/New-Hope-2024-Full-Year-Results-Media-Release.pdf

New Hope Group (2024b) *ASX Appendix 4E and Annual Report 2024*, 17 September 2024 https://newhopegroup.com.au/wp-content/uploads/2024/09/Appendix-4E-and-Annual-Report-2024.pdf

Origin Energy (2024) *Origin Energy 2024 Full Year Results*, 15 August 2024 https://www.originenergy.com.au/wp-content/uploads/291/Origin_FY24-Results-presentation_Final.pdf

Queensland Government Statistician's Office (QGSO) (2023) *Surat Basin population report, 2023* https://www.qgso.qld.gov.au/statistics/theme/population/non-resident-population-queensland-resource-regions/surat-basin#past-release-surat-basin-population-report

Santos (2024) *2024 Half-Year Results*, 21 August 2024 https://www.santos.com/wp-content/uploads/2024/08/2024-Half-year-results.pdf

Senex (2024) *Green light for Senex's $1 billion investment to boost domestic gas supply*, 26 June 2024 https://senexenergy.com.au/news/green-light-for-senexs-1-billion-investment-to-boost-domestic-gas-supply/

Shell plc (2024) *Shell's QGC to develop new wells in Queensland's Western Downs region*, 21 May 2024 https://www.shell.com.au/media/2024-media-releases/shells-qgc-to-develop-new-wells-in-queenslands-western-downs-region.html

Wambo Wind Farm (2024) *Wambo Wind Farm*, accessed 6 November 2024 https://wambowindfarm.com.au/#hero