



GTA Carbon Emissions Model

Embodied Carbon Emissions for Silo Transport Movements to Australian Terminal Ports

| Origin | State | Port | NTP | BHC | Mode | Port Type | Road (CO2-e kg/ freight-tonne) | Rail (CO2-e kg/ freight-tonne) |
|------------------|-------|-------------|-------------|-------------------|--------------|-----------|-----------------------------------|-----------------------------------|
| ALLORA | QLD | BRISBANE | BRISBANE | GRAINX | ROAD | NTP | 25.4772 | |
| BILOELA | QLD | GLADSTONE | GLADSTONE | GRAINCORP | ROAD | NTP | 16.3108 | |
| BROOKSTEAD | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD OR RAIL | NTP | 25.0728 | 2.6671 |
| BUNGUNYA | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD | NTP | 55.6725 | |
| CAPELLA | QLD | MACKAY | MACKAY | GRAINCORP | ROAD OR RAIL | NTP | 44.7537 | 4.7606 |
| CECIL PLAINS | QLD | BRISBANE | BRISBANE | QLD COTTON | ROAD | NTP | 32.3521 | |
| CLIFTON | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD | NTP | 21.2984 | |
| DALBY WEST | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD OR RAIL | NTP | 28.3081 | 3.0112 |
| DINGO | QLD | GLADSTONE | GLADSTONE | GRAINCORP | ROAD | NTP | 33.4305 | |
| EMERALD | QLD | GLADSTONE | GLADSTONE | GRAINCORP | ROAD OR RAIL | NTP | 49.3369 | 5.2482 |
| GINDIE | QLD | GLADSTONE | GLADSTONE | GRAINCORP | ROAD | NTP | 52.7069 | |
| GOONDIWINDI | QLD | BRISBANE | BRISBANE | CARPENDALE | ROAD | NTP | 51.4937 | |
| GOONDIWINDI EAST | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD OR RAIL | NTP | 46.7757 | 4.9757 |
| GOONDIWINDI WEST | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD OR RAIL | NTP | 46.7757 | 4.9757 |
| JANDOWAE | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD | NTP | 35.0481 | |
| JONDARYAN | QLD | BRISBANE | BRISBANE | CHS BROADBENT | ROAD OR RAIL | NTP | 26.8252 | 2.8535 |
| KOORNGOO | QLD | GLADSTONE | GLADSTONE | GRAINCORP | ROAD | NTP | 19.4112 | |
| KUPUNN | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD | NTP | 31.5433 | |
| MACALISTER | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD | NTP | 32.3521 | |
| MALU | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD OR RAIL | NTP | 23.8596 | 2.5380 |
| MEANDARRA | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD OR RAIL | NTP | 48.5281 | 5.1621 |
| MILES | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD OR RAIL | NTP | 45.5625 | 4.8467 |
| MILLMERRAN | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD | NTP | 28.0385 | |
| MOURA | QLD | GLADSTONE | GLADSTONE | GRAINCORP | ROAD | NTP | 25.2076 | |
| MT.MCLAREN | QLD | MACKAY | MACKAY | GRAINCORP | ROAD OR RAIL | NTP | 31.5433 | 3.3554 |
| NATCHA | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD | NTP | 28.3081 | |
| NOONDOO | QLD | BRISBANE | BRISBANE | CLEVELAND | ROAD | NTP | 77.7797 | |
| NOONDOO | QLD | NEWCASTLE | BRISBANE | CLEVELAND | ROAD | Other | 95.0342 | |
| ROMA WEST | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD OR RAIL | NTP | 64.4345 | 6.8542 |
| SURAT | QLD | BRISBANE | BRISBANE | SURAT BULK GRAINS | ROAD | NTP | 64.1649 | |
| TALWOOD | QLD | BRISBANE | BRISBANE | AWB | ROAD OR RAIL | NTP | 60.2557 | 6.4096 |
| TALWOOD | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD OR RAIL | NTP | 60.2557 | 6.4096 |
| THALLON | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD OR RAIL | NTP | 71.0397 | 7.5568 |
| THE GUMS | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD | NTP | 43.5405 | |
| THE GUMS | QLD | BRISBANE | BRISBANE | AWB | ROAD OR RAIL | NTP | 48.2585 | 5.1334 |
| TOOBEAH | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD OR RAIL | NTP | 52.5721 | 5.5923 |
| ULIMAROA | QLD | BRISBANE | BRISBANE | PARKINSON BROS | ROAD | NTP | 48.7977 | |
| ULIMAROA | QLD | NEWCASTLE | BRISBANE | PARKINSON BROS | ROAD | Other | 116.8718 | |
| WALLUMBILLA | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD | NTP | 59.0425 | |
| WARRA | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD | NTP | 34.5089 | |
| YAMALA | QLD | GLADSTONE | GLADSTONE | GRAINCORP | ROAD OR RAIL | NTP | 46.3713 | 4.9327 |
| YAMALA | QLD | MACKAY | GLADSTONE | GRAINCORP | ROAD OR RAIL | Other | 53.7853 | 5.7214 |
| YELARBON | QLD | BRISBANE | BRISBANE | GRAINCORP | ROAD | NTP | 41.2489 | |
| ARDLETHAN | NSW | NEWCASTLE | PORT KEMBLA | EMERALD | ROAD OR RAIL | Other | 74.5038 | 9.1467 |
| ARDLETHAN | NSW | PORT KEMBLA | PORT KEMBLA | EMERALD | ROAD OR RAIL | NTP | 50.0173 | 6.1405 |
| ARDLETHAN | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 74.5038 | 9.1467 |
| ARDLETHAN | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 50.0173 | 6.1405 |
| ARIAH PARK | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 70.9062 | 8.7050 |
| ARIAH PARK | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 46.6519 | 5.7273 |
| ARMATREE | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 49.6692 | 6.0978 |
| ARMATREE | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 64.0593 | 7.8644 |
| BAAN BAA | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 42.0099 | |
| BAAN BAA | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 42.0099 | |
| BARADINE | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 46.3037 | |
| BARADINE | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD | Other | 66.4964 | |
| BARELLAN | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 78.1013 | 9.5883 |
| BARELLAN | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 53.8470 | 6.6107 |
| BARMEDMAN | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 66.8445 | 8.2063 |
| BARMEDMAN | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 46.6519 | 5.7273 |
| BARNES CROSSING | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD | Other | 34.3506 | |
| BARNES CROSSING | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD | NTP | 27.6198 | |
| BATHURST | NSW | NEWCASTLE | PORT KEMBLA | GRAINFORCE | ROAD | Other | 37.6000 | |
| BATHURST | NSW | PORT KEMBLA | PORT KEMBLA | GRAINFORCE | ROAD | NTP | 32.0297 | |
| BEANBRI | NSW | NEWCASTLE | NEWCASTLE | AWB | ROAD OR RAIL | NTP | 64.1754 | 7.8787 |
| BEANBRI | NSW | PORT KEMBLA | NEWCASTLE | AWB | ROAD OR RAIL | Other | 86.5729 | 10.6284 |
| BECKOM | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 73.4593 | 9.0184 |
| BECKOM | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 49.0889 | 6.0265 |
| BELLATA | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 52.3383 | 6.4255 |
| BELLATA | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 79.0297 | 9.7023 |
| BENEREMBAH | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 61.1581 | |
| BENEREMBAH | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 54.0791 | |
| BENEREMBAH | NSW | NEWCASTLE | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 92.8396 | |



GTA Carbon Emissions Model

Embodied Carbon Emissions for Silo Transport Movements to Australian Terminal Ports

| Origin | State | Port | NTP | BHC | Mode | Port Type | Road (CO2-e kg/ freight-tonne) | Rail (CO2-e kg/ freight-tonne) |
|-----------------|-------|-------------|-------------|---------------------------|--------------|-----------|-----------------------------------|-----------------------------------|
| BENEREMBAH | NSW | PORT KEMBLA | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 68.5853 | |
| BENEREMBAH | NSW | GEELONG | MELBOURNE | GRAINLINK | ROAD | Other | 61.1581 | |
| BENEREMBAH | NSW | MELBOURNE | MELBOURNE | GRAINLINK | ROAD | NTP | 54.0791 | |
| BENEREMBAH | NSW | PORT KEMBLA | MELBOURNE | GRAINLINK | ROAD | Other | 68.5853 | |
| BERRIGAN | NSW | PORT KEMBLA | MELBOURNE | MCNAUGHTS GRAIN & ROAD | | Other | 68.3532 | |
| BERRIGAN | NSW | MELBOURNE | MELBOURNE | MCNAUGHTS GRAIN & ROAD | | NTP | 34.3506 | |
| BERRIGAN | NSW | GEELONG | MELBOURNE | MCNAUGHTS GRAIN & ROAD | | Other | 41.4297 | |
| BILLIMARI | NSW | PORT KEMBLA | PORT KEMBLA | EAST COAST STOCK FEI ROAD | | NTP | 44.9112 | |
| BILLIMARI | NSW | NEWCASTLE | PORT KEMBLA | EAST COAST STOCK FEI ROAD | | Other | 50.9457 | |
| BINIGUY | NSW | BRISBANE | BRISBANE | GRAINCORP | ROAD | NTP | 58.2568 | |
| BINIGUY | NSW | NEWCASTLE | BRISBANE | GRAINCORP | ROAD | Other | 63.2470 | |
| BINIGUY | NSW | PORT KEMBLA | BRISBANE | GRAINCORP | ROAD | Other | 90.8668 | |
| BLIGHTY | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 44.4470 | |
| BLIGHTY | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 37.2519 | |
| BLIGHTY | NSW | NEWCASTLE | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 101.3112 | |
| BLIGHTY | NSW | PORT KEMBLA | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 77.0569 | |
| BOGAN GATE | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 62.4346 | |
| BOGAN GATE | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 55.8198 | |
| BOGGABILLA | NSW | BRISBANE | BRISBANE | GRAINCORP | ROAD | NTP | 42.3581 | |
| BOGGABILLA | NSW | NEWCASTLE | BRISBANE | GRAINCORP | ROAD | Other | 71.9507 | |
| BOGGABILLA | NSW | PORT KEMBLA | BRISBANE | GRAINCORP | ROAD | Other | 98.6421 | |
| BOGGABRI | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 40.2692 | |
| BOGGABRI | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD | Other | 66.9606 | |
| BOOLCARROL | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 51.8741 | |
| BOOLCARROL | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD | Other | 78.4495 | |
| BOOROWA | NSW | GEELONG | PORT KEMBLA | GRAINCORP | ROAD | Other | 81.4667 | |
| BOOROWA | NSW | MELBOURNE | PORT KEMBLA | GRAINCORP | ROAD | Other | 74.9680 | |
| BOOROWA | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 55.5877 | |
| BOOROWA | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 31.3334 | |
| BOREE CREEK | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 56.7482 | 6.9668 |
| BOREE CREEK | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 50.4815 | 6.1975 |
| BOREE CREEK | NSW | NEWCASTLE | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 80.4223 | 9.8733 |
| BOREE CREEK | NSW | PORT KEMBLA | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 56.1680 | 6.8956 |
| BRIBBAREE | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 61.9704 | 7.6080 |
| BRIBBAREE | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 42.3581 | 5.2002 |
| BROCKLESBY | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD | Other | 46.0716 | |
| BROCKLESBY | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD | NTP | 38.7605 | |
| BROCKLESBY | NSW | NEWCASTLE | MELBOURNE | GRAINCORP | ROAD | Other | 83.3235 | |
| BROCKLESBY | NSW | PORT KEMBLA | MELBOURNE | GRAINCORP | ROAD | Other | 59.1852 | |
| BUNNALOO | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD | Other | 40.3852 | |
| BUNNALOO | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD | NTP | 30.8692 | |
| BURRABOI | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 42.7062 | |
| BURRABOI | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 38.7605 | |
| BURREN JUNCTION | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 57.9087 | 7.1093 |
| BURREN JUNCTION | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 79.1458 | 9.7165 |
| CALDWELL | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 42.4741 | |
| CALDWELL | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 34.2346 | |
| CALLEEN | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 55.3556 | 6.7959 |
| CALLEEN | NSW | MELBOURNE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 68.3532 | 8.3916 |
| CALLEEN | NSW | GEELONG | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 74.6198 | 9.1609 |
| CARAGABAL | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 61.3902 | 7.5367 |
| CARAGABAL | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 47.6963 | 5.8556 |
| CAROONA | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 29.8247 | |
| CAROONA | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD | Other | 56.4001 | |
| CARRATHOOL | NSW | GEELONG | MELBOURNE | GRAINLINK | ROAD | Other | 58.1408 | |
| CARRATHOOL | NSW | MELBOURNE | MELBOURNE | GRAINLINK | ROAD | NTP | 51.2939 | |
| CARRATHOOL | NSW | PORT KEMBLA | MELBOURNE | GRAINLINK | ROAD | Other | 72.7630 | |
| CLEVELAND | NSW | BRISBANE | BRISBANE | CLEVELAND AG | ROAD | NTP | 3.6672 | |
| CLEVELAND | NSW | NEWCASTLE | BRISBANE | CLEVELAND AG | ROAD | Other | 28.6642 | |
| COLEAMBALLY | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 46.4198 | |
| COLEAMBALLY | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD | Other | 53.4988 | |
| COLEAMBALLY | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD | NTP | 46.4198 | |
| COLEAMBALLY | NSW | PORT KEMBLA | MELBOURNE | GRAINCORP | ROAD | Other | 68.0050 | |
| COLEAMBALLY | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 156.3187 | |
| COLEAMBALLY | NSW | PORT KEMBLA | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 207.4965 | |
| COLEAMBALLY | NSW | GEELONG | MELBOURNE | GRAINLINK | ROAD | Other | 156.3187 | |
| COLEAMBALLY | NSW | MELBOURNE | MELBOURNE | GRAINLINK | ROAD | NTP | 91.6791 | |
| COLEAMBALLY | NSW | PORT KEMBLA | MELBOURNE | GRAINLINK | ROAD | Other | 207.4965 | |
| COLEAMBALLY | NSW | GEELONG | MELBOURNE | VITERRA | ROAD | Other | 156.3187 | |
| COLEAMBALLY | NSW | MELBOURNE | MELBOURNE | VITERRA | ROAD | NTP | 91.6791 | |
| COLEAMBALLY | NSW | PORT KEMBLA | MELBOURNE | VITERRA | ROAD | Other | 207.4965 | |
| COMBARA | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 53.7309 | |

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| Origin | State | Port | NTP | BHC | Mode | Port Type | Road (CO2-e kg/ freight-tonne) | Rail (CO2-e kg/ freight-tonne) |
|-----------------|-------|-------------|-------------|------------------|--------------|-----------|-----------------------------------|-----------------------------------|
| COMBARA | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD | Other | 67.1927 | |
| CONDOBOLIN | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 68.2371 | 8.3773 |
| CONDOBOLIN | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 62.2025 | 7.6365 |
| COOLAMON | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 73.9235 | 9.0754 |
| COOLAMON | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 49.9013 | 6.1263 |
| COOLAMON MARRAR | NSW | GEELONG | PORT KEMBLA | EMERALD | ROAD OR RAIL | Other | 62.3186 | 7.6507 |
| COOLAMON MARRAR | NSW | MELBOURNE | PORT KEMBLA | EMERALD | ROAD OR RAIL | Other | 55.8198 | 6.8529 |
| COOLAMON MARRAR | NSW | NEWCASTLE | PORT KEMBLA | EMERALD | ROAD OR RAIL | Other | 71.9507 | 8.8332 |
| COOLAMON MARRAR | NSW | PORT KEMBLA | PORT KEMBLA | EMERALD | ROAD OR RAIL | NTP | 50.5976 | 6.2117 |
| COONAMBLE | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 55.3556 | 6.7959 |
| COONAMBLE | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 68.7013 | 8.4343 |
| COOTAMUNDRA | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 63.5951 | 7.8074 |
| COOTAMUNDRA | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 37.1358 | 4.5591 |
| COWRA | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 49.9013 | |
| COWRA | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 40.0371 | |
| CROOBLE | NSW | BRISBANE | NEWCASTLE | GRAINCORP | ROAD | Other | 56.4001 | |
| CROOBLE | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 65.2198 | 8.0069 |
| CROOBLE | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 91.6791 | 11.2552 |
| CROPPA CREEK | NSW | BRISBANE | NEWCASTLE | GRAINCORP | ROAD | Other | 51.9902 | |
| CROPPA CREEK | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 66.2643 | 8.1351 |
| CROPPA CREEK | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 92.9556 | 11.4119 |
| CRYON | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 62.5507 | 7.6792 |
| CRYON | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 85.1803 | 10.4574 |
| CULGOORA | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 49.3210 | |
| CUNNINGAR | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 56.5161 | 6.9384 |
| CUNNINGAR | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 32.1457 | 3.9465 |
| CURBAN | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 47.6963 | |
| CURBAN | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD | Other | 61.5062 | |
| CURLEWIS | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 33.8865 | 4.1602 |
| CURLEWIS | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 60.4618 | 7.4228 |
| DENILQUIN | NSW | PORTLAND | MELBOURNE | GRAINCORP | ROAD | Other | 61.5062 | |
| DENILQUIN | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 76.5927 | |
| DENILQUIN | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 67.5408 | |
| DENILQUIN | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 76.5927 | 9.4031 |
| DENILQUIN | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 67.5408 | 8.2918 |
| DUBBO | NSW | NEWCASTLE | NEWCASTLE | FLETCHER | ROAD OR RAIL | NTP | 43.8667 | 5.3854 |
| DUBBO | NSW | PORT KEMBLA | NEWCASTLE | FLETCHER | ROAD OR RAIL | Other | 52.9186 | 6.4967 |
| EDGEROI | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 49.9013 | 6.1263 |
| EDGEROI | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 76.4766 | 9.3889 |
| EMERALD HILL | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 38.6445 | 4.7443 |
| EMERALD HILL | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 64.7556 | 7.9499 |
| EMERY | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 52.2223 | |
| EMERY | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 46.4198 | |
| EMERY | NSW | NEWCASTLE | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 84.1359 | |
| EMERY | NSW | PORT KEMBLA | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 67.3087 | |
| EUABALONG WEST | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 77.4050 | 9.5028 |
| EUABALONG WEST | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 70.9062 | 8.7050 |
| FINLEY | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 33.6544 | |
| FINLEY | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 79.8421 | |
| FINLEY | NSW | NEWCASTLE | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 187.5360 | |
| FINLEY | NSW | PORT KEMBLA | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 144.8298 | |
| FINLEY | NSW | GEELONG | MELBOURNE | KELLY | ROAD | Other | 79.8421 | |
| FINLEY | NSW | MELBOURNE | MELBOURNE | KELLY | ROAD | NTP | 33.6544 | |
| FINLEY | NSW | NEWCASTLE | MELBOURNE | KELLY | ROAD | Other | 187.5360 | |
| FINLEY | NSW | PORT KEMBLA | MELBOURNE | KELLY | ROAD | Other | 144.8298 | |
| FORBES | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 62.0865 | |
| FORBES | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 50.4815 | |
| FORBES | NSW | NEWCASTLE | PORT KEMBLA | LINX | ROAD OR RAIL | Other | 62.0865 | 7.6222 |
| FORBES | NSW | PORT KEMBLA | PORT KEMBLA | LINX | ROAD OR RAIL | NTP | 50.4815 | 6.1975 |
| GARAH | NSW | BRISBANE | NEWCASTLE | GRAINCORP | ROAD | Other | 56.0519 | |
| GARAH | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 65.1038 | 7.9926 |
| GARAH | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 91.0989 | 11.1840 |
| GILGANDRA | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 44.6791 | 5.4851 |
| GILGANDRA | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 58.4889 | 7.1806 |
| GOBONDERY | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 58.8371 | |
| GOBONDERY | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 59.3013 | |
| GOGELDRIE | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 58.9531 | |
| GOGELDRIE | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 52.6865 | |
| GOGELDRIE | NSW | PORT KEMBLA | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 62.3186 | |
| GOOLGOWI | NSW | PORT KEMBLA | PORT KEMBLA | EMERALD | ROAD OR RAIL | NTP | 65.9161 | 8.0924 |
| GOOLGOWI | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 85.4124 | 10.4859 |
| GOOLGOWI | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 65.9161 | 8.0924 |

**GTA Carbon Emissions Model****Embodied Carbon Emissions for Silo Transport Movements to Australian Terminal Ports**

| Origin | State | Port | NTP | BHC | Mode | Port Type | Road (CO ₂ -e kg/ freight-tonne) | Rail (CO ₂ -e kg/ freight-tonne) |
|-----------------|-------|--------------|-------------|---------------------------|--------------|-----------|--|--|
| GOOLGOWI | NSW | GEELONG | PORT KEMBLA | EMERALD | ROAD OR RAIL | Other | 65.2198 | 8.0069 |
| GOOLGOWI | NSW | MELBOURNE | PORT KEMBLA | EMERALD | ROAD OR RAIL | Other | 58.9531 | 7.2375 |
| GOOLGOWI | NSW | NEWCASTLE | PORT KEMBLA | EMERALD | ROAD OR RAIL | Other | 89.4742 | 10.9845 |
| GOOLOOGONG | NSW | NEWCASTLE | PORT KEMBLA | EAST COAST STOCK FEI ROAD | | Other | 52.8025 | |
| GOOLOOGONG | NSW | PORT KEMBLA | PORT KEMBLA | EAST COAST STOCK FEI ROAD | | NTP | 46.3037 | |
| GREENETHORPE | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 54.0791 | |
| GREENETHORPE | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 42.2420 | |
| GRENFELL | NSW | PORT KEMBLA | PORT KEMBLA | GRENFELL COMMODIT ROAD | | NTP | 42.4741 | |
| GRENFELL | NSW | NEWCASTLE | NEWCASTLE | GRENFELL COMMODIT ROAD | | NTP | 56.2840 | |
| GRONG GRONG | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 78.5655 | 9.6453 |
| GRONG GRONG | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 55.9359 | 6.8671 |
| GULAR | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 52.8025 | 6.4824 |
| GULAR | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 68.1211 | 8.3631 |
| GUNNEDAH | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 35.9753 | 4.4166 |
| GUNNEDAH | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 62.4346 | 7.6650 |
| GURLEY | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 54.7754 | 6.2746 |
| GURLEY | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 81.4667 | 10.0015 |
| HANWOOD | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD | Other | 58.9531 | |
| HANWOOD | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD | NTP | 52.6865 | |
| HANWOOD | NSW | NEWCASTLE | MELBOURNE | GRAINCORP | ROAD | Other | 84.0198 | |
| HANWOOD | NSW | PORT KEMBLA | MELBOURNE | GRAINCORP | ROAD | Other | 62.7828 | |
| HARDEN | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 57.0964 | 7.0096 |
| HARDEN | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 32.8420 | 4.0319 |
| HAY | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 55.0075 | |
| HAY | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 96.3211 | |
| HAY | NSW | NEWCASTLE | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 101.6594 | |
| HAY | NSW | PORT KEMBLA | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 77.4050 | |
| HAY | NSW | MELBOURNE | MELBOURNE | HAY PLAINS GRAIN STC ROAD | | NTP | 96.3211 | |
| HAY | NSW | OUTER HARBOR | MELBOURNE | HAY PLAINS GRAIN STC ROAD | | Other | 80.0742 | |
| HENTY WEST | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 52.8025 | 6.4824 |
| HENTY WEST | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 45.3754 | 5.5706 |
| HENTY WEST | NSW | NEWCASTLE | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 78.5655 | 9.6453 |
| HENTY WEST | NSW | PORT KEMBLA | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 54.4272 | 6.6819 |
| HILLSTON | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 85.0643 | 10.4431 |
| HILLSTON | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 72.9951 | 8.9614 |
| HOGAN | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 37.7161 | |
| JUNEE SUB | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 68.0050 | 8.3488 |
| JUNEE SUB | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 46.1877 | 5.6704 |
| JUNEE | NSW | NEWCASTLE | PORT KEMBLA | HANLON ENTERPRISES ROAD | | Other | 68.0050 | |
| JUNEE | NSW | PORT KEMBLA | PORT KEMBLA | HANLON ENTERPRISES ROAD | | NTP | 46.7679 | |
| KADUNGLE | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 57.0964 | |
| KADUNGLE | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 58.8371 | |
| KIACATOO | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 65.8001 | |
| KIACATOO | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 71.3704 | |
| KIKOIRA | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 58.7210 | 7.2090 |
| KYALITE | NSW | GEELONG | MELBOURNE | PEARSONS | ROAD | Other | 47.8124 | |
| KYALITE | NSW | MELBOURNE | MELBOURNE | PEARSONS | ROAD | NTP | 46.4198 | |
| LAKE CARGELLIGO | NSW | MELBOURNE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 72.7630 | 8.9329 |
| LAKE CARGELLIGO | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 79.1458 | 9.7165 |
| LAKE CARGELLIGO | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 63.4791 | 7.7932 |
| LAKE CARGELLIGO | NSW | NEWCASTLE | PORT KEMBLA | LAKE GRAIN | ROAD | Other | 79.1458 | |
| LAKE CARGELLIGO | NSW | MELBOURNE | PORT KEMBLA | LAKE GRAIN | ROAD | Other | 68.7013 | |
| LAKE CARGELLIGO | NSW | PORT KEMBLA | PORT KEMBLA | LAKE GRAIN | ROAD | NTP | 66.6124 | |
| LOCKHART | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 56.5161 | 6.9384 |
| LOCKHART | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 48.3926 | 5.9411 |
| LOCKHART | NSW | NEWCASTLE | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 77.9853 | 9.5741 |
| LOCKHART | NSW | PORT KEMBLA | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 53.8470 | 6.6107 |
| MAIMURU | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 62.3186 | |
| MAIMURU | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 38.1803 | |
| MANILDRA | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 49.0889 | |
| MANILDRA | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 41.0815 | |
| MARRAR | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 72.2988 | 8.8760 |
| MARRAR | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 48.1605 | 5.9126 |
| MATHOURA | NSW | MELBOURNE | MELBOURNE | UNIVERSAL COMMODI ROAD | | NTP | 30.0568 | |
| MATHOURA | NSW | GEELONG | MELBOURNE | UNIVERSAL COMMODI ROAD | | Other | 40.9655 | |
| MATONG | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 77.0569 | |
| MATONG | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 50.8297 | |
| MERAH NORTH | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 54.8914 | 6.7389 |
| MERAH NORTH | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 81.2346 | 9.9730 |
| MERRIWAGGA | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 87.7334 | 10.7708 |
| MERRIWAGGA | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 69.8618 | 8.5768 |
| MERRYWINEBONE | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 64.1754 | 7.8787 |



GTA Carbon Emissions Model

Embodied Carbon Emissions for Silo Transport Movements to Australian Terminal Ports

| Origin | State | Port | NTP | BHC | Mode | Port Type | Road (CO2-e kg/ freight-tonne) | Rail (CO2-e kg/ freight-tonne) |
|---------------|-------|-------------|-------------|--------------------|--------------|-----------|-----------------------------------|-----------------------------------|
| MERRYWINEBONE | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 85.9927 | 10.5571 |
| MILBRULONG | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 55.4717 | 6.8101 |
| MILBRULONG | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 50.8297 | 6.2402 |
| MILBRULONG | NSW | NEWCASTLE | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 77.5211 | 9.5171 |
| MILBRULONG | NSW | PORT KEMBLA | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 53.2667 | 6.5394 |
| MILGUY | NSW | BRISBANE | NEWCASTLE | GRAINCORP | ROAD | Other | 57.3284 | |
| MILGUY | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 63.7112 | 7.8217 |
| MILGUY | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 90.5186 | 11.1128 |
| MILVALE | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 66.1482 | 8.1209 |
| MILVALE | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 39.3408 | 4.8298 |
| MIRROOL | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 72.8791 | 8.9472 |
| MIRROOL | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 49.2050 | 6.0408 |
| MOAMA | NSW | GEELONG | MELBOURNE | UNIVERSAL COMMODI | ROAD | Other | 34.2346 | |
| MOAMA | NSW | MELBOURNE | MELBOURNE | UNIVERSAL COMMODI | ROAD | NTP | 27.1556 | |
| MOOMBOOLDI | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 76.9408 | 9.4458 |
| MOOMBOOLDI | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 52.5704 | 6.4539 |
| MOREE SUB | NSW | BRISBANE | NEWCASTLE | GRAINCORP | ROAD | Other | 59.0692 | |
| MOREE SUB | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 58.1408 | 7.1378 |
| MOREE SUB | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 85.2964 | 10.4716 |
| MOREE | NSW | NEWCASTLE | NEWCASTLE | LOUIS DREYFUS | ROAD OR RAIL | NTP | 58.4889 | 7.1806 |
| MOREE | NSW | NEWCASTLE | NEWCASTLE | CHS BROADBENT | ROAD OR RAIL | NTP | 58.4889 | 7.1806 |
| MOREE | NSW | BRISBANE | NEWCASTLE | CHS BROADBENT | ROAD OR RAIL | Other | 55.7038 | 6.8386 |
| MOREE | NSW | PORT KEMBLA | NEWCASTLE | CHS BROADBENT | ROAD OR RAIL | Other | 85.2964 | 10.4716 |
| MOREE HADDAD | NSW | BRISBANE | NEWCASTLE | GRAINCORP | ROAD | Other | 55.7038 | |
| MOREE HADDAD | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 58.4889 | |
| MOREE HADDAD | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD | Other | 85.2964 | |
| MOULAMEIN | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 45.3754 | |
| MOULAMEIN | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 43.1704 | |
| MOULAMEIN | NSW | GEELONG | MELBOURNE | MOULAMEIN GRAIN CI | ROAD | Other | 44.7951 | |
| MOULAMEIN | NSW | MELBOURNE | MELBOURNE | MOULAMEIN GRAIN CI | ROAD | NTP | 42.0099 | |
| MUNGERIBAR | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 51.5260 | |
| MUNGERIBAR | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD | Other | 61.9704 | |
| MURRAMI | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 61.0420 | |
| MURRAMI | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 54.8914 | |
| MURRAMI | NSW | PORT KEMBLA | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 63.8272 | |
| NARADHAN | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 82.6272 | 10.1440 |
| NARADHAN | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 62.6667 | 7.6934 |
| NARRABRI SUB | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 46.5358 | 5.7131 |
| NARRABRI SUB | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 73.6914 | 9.0469 |
| NARRABRI | NSW | NEWCASTLE | NEWCASTLE | GLENCORE | ROAD OR RAIL | NTP | 47.0000 | 5.7701 |
| NARRABRI | NSW | BRISBANE | NEWCASTLE | GLENCORE | ROAD | Other | 70.5581 | |
| NARRABRI | NSW | NEWCASTLE | NEWCASTLE | LOUIS DREYFUS | ROAD OR RAIL | NTP | 47.0000 | 5.7701 |
| NARRABRI | NSW | NEWCASTLE | NEWCASTLE | VITERRA | ROAD OR RAIL | NTP | 47.0000 | 5.7701 |
| NARRABRI | NSW | PORT KEMBLA | NEWCASTLE | VITERRA | ROAD OR RAIL | Other | 73.5754 | 9.0327 |
| NARRABRI | NSW | PORT KEMBLA | NEWCASTLE | CARGILL | ROAD | Other | 73.5754 | |
| NARRABRI | NSW | NEWCASTLE | NEWCASTLE | CARGILL | ROAD | NTP | 47.0000 | |
| NARRANDERA | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 82.0470 | 10.0727 |
| NARRANDERA | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 57.7926 | 7.0951 |
| NARROMINE | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 49.5531 | 6.0835 |
| NARROMINE | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 59.3013 | 7.2803 |
| NARROMINE | NSW | NEWCASTLE | NEWCASTLE | AWB | ROAD OR RAIL | NTP | 48.5087 | 5.9553 |
| NARROMINE | NSW | PORT KEMBLA | NEWCASTLE | AWB | ROAD OR RAIL | Other | 57.3284 | 7.0381 |
| NARWONAH | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 45.6075 | |
| NEVERTIRE | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 56.7482 | 6.9668 |
| NEVERTIRE | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 67.0766 | 8.2348 |
| NOONBINNA | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 50.8297 | |
| NOONBINNA | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 39.4568 | |
| NORTH STAR | NSW | BRISBANE | NEWCASTLE | GRAINCORP | ROAD | Other | 46.3037 | |
| NORTH STAR | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 64.8717 | 7.9641 |
| NORTH STAR | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 91.4470 | 11.2267 |
| NYNGAN | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 63.7112 | 7.8217 |
| NYNGAN | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 73.9235 | 9.0754 |
| NYNGAN | NSW | NEWCASTLE | NEWCASTLE | AWB | ROAD OR RAIL | NTP | 63.1309 | 7.7504 |
| NYNGAN | NSW | PORT KEMBLA | NEWCASTLE | AWB | ROAD OR RAIL | Other | 71.8346 | 8.8190 |
| NYRANG CREEK | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 51.8741 | |
| NYRANG CREEK | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 44.9112 | |
| OAKLANDS | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 47.9284 | 5.8841 |
| OAKLANDS | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 37.6000 | 4.6161 |
| OAKLANDS | NSW | PORT KEMBLA | MELBOURNE | GRAINCORP | ROAD | Other | 64.6396 | |
| OAKLANDS | NSW | GEELONG | MELBOURNE | AWB | ROAD OR RAIL | Other | 45.6075 | 5.5991 |
| OAKLANDS | NSW | MELBOURNE | MELBOURNE | AWB | ROAD OR RAIL | NTP | 39.1087 | 4.8013 |
| OAKLANDS | NSW | PORT KEMBLA | MELBOURNE | AWB | ROAD OR RAIL | Other | 65.5680 | 8.0496 |

**GTA Carbon Emissions Model****Embodied Carbon Emissions for Silo Transport Movements to Australian Terminal Ports**

| Origin | State | Port | NTP | BHC | Mode | Port Type | Road (CO ₂ -e kg/ freight-tonne) | Rail (CO ₂ -e kg/ freight-tonne) |
|------------------|-------|-------------|-------------|--------------------|--------------|-----------|--|--|
| PARKES SUB | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 55.1235 | 6.7674 |
| PARKES SUB | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 48.9729 | 6.0123 |
| PEAK HILL | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 52.5704 | 6.4539 |
| PEAK HILL | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 52.2223 | 6.4112 |
| PREMER | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 36.0914 | 4.4309 |
| PREMER | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 57.2124 | 7.0238 |
| QUANDIALLA | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 61.7383 | 7.5795 |
| QUANDIALLA | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 45.8395 | 5.6276 |
| QUIRINDI | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 26.4593 | |
| QUIRINDI | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD | Other | 53.1507 | |
| RAND | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD | Other | 51.0618 | |
| RAND | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD | NTP | 43.9828 | |
| RAND | NSW | NEWCASTLE | MELBOURNE | GRAINCORP | ROAD | Other | 83.5556 | |
| RAND | NSW | PORT KEMBLA | MELBOURNE | GRAINCORP | ROAD | Other | 59.4173 | |
| RED BEND | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 62.0865 | 7.6222 |
| RED BEND | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 50.4815 | 6.1975 |
| SPRING RIDGE | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 31.9136 | 3.9180 |
| SPRING RIDGE | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 58.3729 | 7.1663 |
| TAMARANG | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 33.6544 | |
| TEMORA SUB | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 66.3803 | 8.1494 |
| TEMORA SUB | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 45.0272 | 5.5279 |
| THE ROCK | NSW | GEELONG | MELBOURNE | EMERALD | ROAD OR RAIL | Other | 55.3556 | 6.7959 |
| THE ROCK | NSW | MELBOURNE | MELBOURNE | EMERALD | ROAD OR RAIL | NTP | 49.0889 | 6.0265 |
| THE ROCK | NSW | NEWCASTLE | MELBOURNE | EMERALD | ROAD OR RAIL | Other | 73.9235 | 9.0754 |
| THE ROCK | NSW | PORT KEMBLA | MELBOURNE | EMERALD | ROAD OR RAIL | Other | 52.5704 | 6.4539 |
| TABBITA | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD | NTP | 56.7482 | |
| TABBITA | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD | Other | 63.1309 | |
| TOCUMWAL | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 38.8766 | 4.7728 |
| TOCUMWAL | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 31.6815 | 3.8895 |
| TOCUMWAL | NSW | GEELONG | MELBOURNE | EMERALD | ROAD OR RAIL | Other | 37.6000 | 4.6161 |
| TOCUMWAL | NSW | MELBOURNE | MELBOURNE | EMERALD | ROAD OR RAIL | NTP | 31.3334 | 3.8467 |
| TOMINGLEY WEST | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 51.2939 | |
| TOMINGLEY WEST | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD | Other | 56.4001 | |
| TOTTENHAM | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 62.2025 | 7.6365 |
| TOTTENHAM | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 66.2643 | 8.1351 |
| TRANGIE | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 53.1507 | 6.5252 |
| TRANGIE | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 63.2470 | 7.7647 |
| TRUNDLE | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 60.5778 | 7.4370 |
| TRUNDLE | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 54.6593 | 6.7104 |
| TULLIBIGEAL | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 59.1852 | 7.2660 |
| UNGARIE | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD | Other | 73.2272 | |
| UNGARIE | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 55.4717 | |
| UNGARIE | NSW | NEWCASTLE | PORT KEMBLA | HANLON ENTERPRISES | ROAD | Other | 73.2272 | |
| UNGARIE | NSW | PORT KEMBLA | PORT KEMBLA | HANLON ENTERPRISES | ROAD | NTP | 55.4717 | |
| WALGETT | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 68.2371 | 8.3773 |
| WALGETT | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 82.9754 | 10.1867 |
| WALLENDREEN | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD | NTP | 35.1630 | |
| WALSH | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 60.8099 | |
| WALSH | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 53.8470 | |
| WALSH | NSW | PORT KEMBLA | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 60.5778 | |
| WARRAGOON | NSW | GEELONG | MELBOURNE | GRAINCORP | ROAD | Other | 42.3581 | |
| WARRAGOON | NSW | MELBOURNE | MELBOURNE | GRAINCORP | ROAD | NTP | 35.2790 | |
| WEE WAA | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 51.7581 | 6.3542 |
| WEE WAA | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 78.3334 | 9.6168 |
| WEEMELAH | NSW | BRISBANE | NEWCASTLE | GRAINCORP | ROAD | Other | 60.6939 | |
| WEEMELAH | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 69.0494 | 8.4770 |
| WEEMELAH | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 95.9729 | 11.7824 |
| WERRIS CREEK SUB | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 28.4321 | 3.4905 |
| WERRIS CREEK SUB | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 54.8914 | 6.7389 |
| WEST WYALONG | NSW | NEWCASTLE | PORT KEMBLA | AWB | ROAD OR RAIL | Other | 71.1383 | 8.7335 |
| WEST WYALONG | NSW | PORT KEMBLA | PORT KEMBLA | AWB | ROAD OR RAIL | NTP | 53.0346 | 6.5109 |
| WHITTON | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 58.6050 | |
| WHITTON | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 52.3383 | |
| WHITTON | NSW | PORT KEMBLA | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 62.8988 | |
| WILLBRIGGIE | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 57.0964 | |
| WILLBRIGGIE | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 50.8297 | |
| WILLBRIGGIE | NSW | NEWCASTLE | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 85.8766 | |
| WILLBRIGGIE | NSW | PORT KEMBLA | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 64.5235 | |
| WILLOW TREE | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD OR RAIL | NTP | 24.2543 | 2.9776 |
| WILLOW TREE | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD OR RAIL | Other | 51.1778 | 6.2830 |
| WIRRINYA | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 50.5976 | 6.2117 |
| WUMBULGAL | NSW | GEELONG | MELBOURNE | GRAINLINK | ROAD OR RAIL | Other | 60.8099 | 7.4655 |



GTA Carbon Emissions Model

Embodied Carbon Emissions for Silo Transport Movements to Australian Terminal Ports

| Origin | State | Port | NTP | BHC | Mode | Port Type | Road (CO2-e kg/ freight-tonne) | Rail (CO2-e kg/ freight-tonne) |
|--------------|-------|--------------|-------------|--------------------|--------------|-----------|-----------------------------------|-----------------------------------|
| WUMBULGAL | NSW | MELBOURNE | MELBOURNE | GRAINLINK | ROAD OR RAIL | NTP | 54.5433 | 6.6961 |
| WUMBULGAL | NSW | PORT KEMBLA | MELBOURNE | GRAINLINK | ROAD OR RAIL | Other | 61.8544 | 7.5937 |
| WYALONG | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 68.3532 | 8.3916 |
| WYALONG | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 50.3655 | 6.1833 |
| YANCO | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 84.4840 | 10.3719 |
| YANCO | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 60.2297 | 7.3943 |
| YARRAWA | NSW | BRISBANE | BRISBANE | GRAINCORP | ROAD | NTP | 59.5334 | |
| YARRAWA | NSW | NEWCASTLE | BRISBANE | GRAINCORP | ROAD | Other | 70.4420 | |
| YETHERA | NSW | NEWCASTLE | NEWCASTLE | GRAINCORP | ROAD | NTP | 60.6939 | |
| YETHERA | NSW | PORT KEMBLA | NEWCASTLE | GRAINCORP | ROAD | Other | 62.4346 | |
| YENDA | NSW | PORT KEMBLA | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 57.7926 | |
| YENDA | NSW | NEWCASTLE | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | Other | 82.2791 | 10.1012 |
| YENDA | NSW | PORT KEMBLA | PORT KEMBLA | GRAINCORP | ROAD OR RAIL | NTP | 57.7926 | 7.0951 |
| YENDA | NSW | GEELONG | MELBOURNE | AUST. GRAIN STOR | ROAD | Other | 61.0420 | |
| YENDA | NSW | MELBOURNE | MELBOURNE | AUST. GRAIN STOR | ROAD | NTP | 54.7754 | |
| BALLIANG | VIC | GEELONG | GEELONG | RIORDANS | ROAD | NTP | 3.9016 | |
| BALLIANG | VIC | MELBOURNE | GEELONG | RIORDANS | ROAD | Other | 7.4486 | |
| BERRIWILLOCK | VIC | GEELONG | MELBOURNE | BERRIWILLOCK GRAIN | ROAD | Other | 46.4649 | |
| BERRIWILLOCK | VIC | MELBOURNE | MELBOURNE | BERRIWILLOCK GRAIN | ROAD | NTP | 39.4892 | |
| BERRIWILLOCK | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 46.4649 | 5.6474 |
| BERRIWILLOCK | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 39.4892 | 4.7996 |
| BERRYBANK | VIC | GEELONG | GEELONG | GRAINCORP | ROAD | NTP | 9.6950 | |
| BERRYBANK | VIC | MELBOURNE | GEELONG | GRAINCORP | ROAD | Other | 18.3258 | |
| BERRYBANK | VIC | PORTLAND | GEELONG | GRAINCORP | ROAD | Other | 24.7103 | |
| BEULAH | VIC | GEELONG | PORTLAND | SHANNONS | ROAD | Other | 40.7898 | |
| BEULAH | VIC | MELBOURNE | PORTLAND | SHANNONS | ROAD | Other | 42.6815 | |
| BEULAH | VIC | PORTLAND | PORTLAND | SHANNONS | ROAD | NTP | 36.5334 | |
| BEULAH | VIC | GEELONG | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 40.7898 | 4.9576 |
| BEULAH | VIC | MELBOURNE | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 42.6815 | 5.1876 |
| BEULAH | VIC | OUTER HARBOR | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 57.1057 | 6.9407 |
| BEULAH | VIC | PORTLAND | PORTLAND | GRAINCORP | ROAD OR RAIL | NTP | 36.5334 | 4.4403 |
| BIRCHIP | VIC | GEELONG | GEELONG | AWB | ROAD OR RAIL | NTP | 36.4152 | 4.4259 |
| BIRCHIP | VIC | MELBOURNE | GEELONG | AWB | ROAD OR RAIL | Other | 37.0064 | 4.4978 |
| BOORT | VIC | GEELONG | MELBOURNE | BOORT CO-OP | ROAD | Other | 63.3719 | |
| BOORT | VIC | MELBOURNE | MELBOURNE | BOORT CO-OP | ROAD | NTP | 60.5344 | |
| BOORT | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 63.3719 | 7.7023 |
| BOORT | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 60.5344 | 7.3574 |
| BOORT | VIC | PORTLAND | MELBOURNE | GRAINCORP | ROAD | Other | 44.4549 | |
| BRIDGEWATER | VIC | MELBOURNE | MELBOURNE | SOUTHERN GRAIN | ROAD | NTP | 21.1634 | |
| BRIDGEWATER | VIC | GEELONG | MELBOURNE | SOUTHERN GRAIN | ROAD | Other | 23.5280 | |
| CARPOLAC | VIC | GEELONG | PORTLAND | GRAINCORP | ROAD | Other | 44.4549 | |
| CARPOLAC | VIC | MELBOURNE | PORTLAND | GRAINCORP | ROAD | Other | 44.9278 | |
| CARPOLAC | VIC | PORTLAND | PORTLAND | GRAINCORP | ROAD | NTP | 33.2230 | |
| CARWARP | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 60.7708 | 7.3862 |
| CARWARP | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 60.5344 | 7.3574 |
| CARWARP | VIC | OUTER HARBOR | MELBOURNE | GRAINCORP | ROAD | Other | 51.4306 | |
| CHARLTON | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 32.5136 | 3.9517 |
| CHARLTON | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 29.2031 | 3.5494 |
| CHARLTON | VIC | PORTLAND | MELBOURNE | GRAINCORP | ROAD | Other | 43.0361 | |
| CHARLTON | VIC | GEELONG | MELBOURNE | AWB | ROAD OR RAIL | Other | 31.0948 | 3.7793 |
| CHARLTON | VIC | MELBOURNE | MELBOURNE | AWB | ROAD OR RAIL | NTP | 29.3213 | 3.5637 |
| CHARLTON | VIC | PORTLAND | MELBOURNE | AWB | ROAD OR RAIL | Other | 39.0163 | 4.7421 |
| COPE COPE | VIC | GEELONG | GEELONG | GRAINCORP | ROAD | NTP | 29.0849 | |
| COPE COPE | VIC | MELBOURNE | GEELONG | GRAINCORP | ROAD | Other | 31.8042 | |
| COPE COPE | VIC | PORTLAND | GEELONG | GRAINCORP | ROAD | Other | 37.7157 | |
| DIMBOOLA | VIC | GEELONG | PORTLAND | AWB | ROAD OR RAIL | Other | 36.2970 | 4.4116 |
| DIMBOOLA | VIC | MELBOURNE | PORTLAND | AWB | ROAD OR RAIL | Other | 39.4892 | 4.7996 |
| DIMBOOLA | VIC | OUTER HARBOR | PORTLAND | AWB | ROAD OR RAIL | Other | 49.5389 | 6.0210 |
| DIMBOOLA | VIC | PORTLAND | PORTLAND | AWB | ROAD OR RAIL | NTP | 29.9125 | 3.6356 |
| DONALD | VIC | GEELONG | GEELONG | GRAINCORP | ROAD OR RAIL | NTP | 30.7401 | 3.7362 |
| DONALD | VIC | MELBOURNE | GEELONG | GRAINCORP | ROAD OR RAIL | Other | 33.1047 | 4.0236 |
| DONALD | VIC | PORTLAND | GEELONG | GRAINCORP | ROAD | Other | 35.5876 | |
| DOOEN | VIC | GEELONG | PORTLAND | VITERRA | ROAD OR RAIL | Other | 32.9865 | 4.0092 |
| DOOEN | VIC | MELBOURNE | PORTLAND | VITERRA | ROAD OR RAIL | Other | 35.7058 | 4.3397 |
| DOOEN | VIC | OUTER HARBOR | PORTLAND | VITERRA | ROAD OR RAIL | Other | 54.2681 | 6.5958 |
| DOOEN | VIC | PORTLAND | PORTLAND | VITERRA | ROAD OR RAIL | NTP | 26.2473 | 3.1901 |
| DOOKIE | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD | Other | 32.7500 | |
| DOOKIE | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD | NTP | 26.3656 | |
| DUNOLLY | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 21.7545 | 2.6441 |
| DUNOLLY | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 23.2915 | 2.8309 |
| EDENHOPE | VIC | GEELONG | PORTLAND | RIORDANS | ROAD | Other | 39.9621 | |
| EDENHOPE | VIC | MELBOURNE | PORTLAND | RIORDANS | ROAD | Other | 46.2284 | |



GTA Carbon Emissions Model

Embodied Carbon Emissions for Silo Transport Movements to Australian Terminal Ports

| Origin | State | Port | NTP | BHC | Mode | Port Type | Road (CO2-e kg/ freight-tonne) | Rail (CO2-e kg/ freight-tonne) |
|--------------------|-------|---------------|--------------|---------------|--------------|-----------|-----------------------------------|-----------------------------------|
| EDENHOPE | VIC | OUTER HARBOUR | PORTLAND | RIORDANS | ROAD | Other | 48.0019 | |
| EDENHOPE | VIC | PORTLAND | PORTLAND | RIORDANS | ROAD | NTP | 19.8628 | |
| ELMORE | VIC | GEELONG | MELBOURNE | EMERALD | ROAD | Other | 27.6661 | |
| ELMORE | VIC | MELBOURNE | MELBOURNE | EMERALD | ROAD | NTP | 20.2175 | |
| ELMORE | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 27.6661 | 3.3626 |
| ELMORE | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 20.2175 | 2.4573 |
| GOROKE | VIC | GEELONG | PORTLAND | GRAINCORP | ROAD | Other | 40.6715 | |
| GOROKE | VIC | MELBOURNE | PORTLAND | GRAINCORP | ROAD | Other | 43.5091 | |
| GOROKE | VIC | PORTLAND | PORTLAND | GRAINCORP | ROAD | NTP | 31.4495 | |
| HAMILTON | VIC | GEELONG | PORTLAND | GRAINCORP | ROAD | Other | 27.6661 | |
| HAMILTON | VIC | MELBOURNE | PORTLAND | GRAINCORP | ROAD | Other | 37.1246 | |
| HAMILTON | VIC | PORTLAND | PORTLAND | GRAINCORP | ROAD | NTP | 10.1679 | |
| HOPETOON | VIC | GEELONG | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 46.8195 | 5.6905 |
| HOPETOON | VIC | MELBOURNE | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 47.5289 | 5.7767 |
| HOPETOON | VIC | OUTER HARBOR | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 54.1499 | 6.5814 |
| HOPETOON | VIC | PORTLAND | PORTLAND | GRAINCORP | ROAD OR RAIL | NTP | 39.6074 | 4.8139 |
| HORSHAM | VIC | GEELONG | PORTLAND | SHANNONS | ROAD | Other | 32.0406 | |
| HORSHAM | VIC | MELBOURNE | PORTLAND | SHANNONS | ROAD | Other | 35.1147 | |
| HORSHAM | VIC | PORTLAND | PORTLAND | SHANNONS | ROAD | NTP | 25.6562 | |
| HORSHAM | VIC | OUTER HARBOR | PORTLAND | SHANNONS | ROAD | Other | 53.7952 | |
| JEPARIT | VIC | GEELONG | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 42.0903 | 5.1157 |
| JEPARIT | VIC | MELBOURNE | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 44.9278 | 5.4606 |
| JEPARIT | VIC | OUTER HARBOR | PORTLAND | GRAINCORP | ROAD | Other | 50.1300 | |
| JEPARIT | VIC | PORTLAND | PORTLAND | GRAINCORP | ROAD OR RAIL | NTP | 34.7600 | 4.2248 |
| LAHARUM | VIC | MELBOURNE | PORTLAND | LAHARUM BULK | ROAD | Other | 33.3412 | |
| LAHARUM | VIC | PORTLAND | PORTLAND | LAHARUM BULK | ROAD | NTP | 24.1192 | |
| LAKE BOLAC | VIC | GEELONG | GEELONG | CHS BROADBENT | ROAD | NTP | 18.2076 | |
| LAKE BOLAC | VIC | MELBOURNE | GEELONG | CHS BROADBENT | ROAD | Other | 26.7202 | |
| LAKE BOLAC | VIC | PORTLAND | GEELONG | CHS BROADBENT | ROAD | Other | 19.5081 | |
| LARA | VIC | GEELONG | GEELONG | RIORDANS | ROAD | NTP | 2.0099 | |
| LARA | VIC | MELBOURNE | GEELONG | RIORDANS | ROAD | Other | 7.2121 | |
| LILLIMUR | VIC | GEELONG | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 48.8295 | 5.9348 |
| LILLIMUR | VIC | MELBOURNE | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 50.3665 | 6.1216 |
| LILLIMUR | VIC | OUTER HARBOR | PORTLAND | GRAINCORP | ROAD | Other | 40.4351 | |
| LILLIMUR | VIC | PORTLAND | PORTLAND | GRAINCORP | ROAD OR RAIL | NTP | 30.5036 | 3.7074 |
| LISMORE | VIC | GEELONG | GEELONG | RIORDANS | ROAD | NTP | 11.5157 | |
| LISMORE | VIC | MELBOURNE | GEELONG | RIORDANS | ROAD | Other | 19.3899 | |
| LISMORE | VIC | PORTLAND | GEELONG | RIORDANS | ROAD | Other | 22.5822 | |
| MANANGATANG | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 50.9576 | 6.1934 |
| MANANGATANG | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 48.5930 | 5.9060 |
| MANANGATANG | VIC | PORTLAND | MELBOURNE | GRAINCORP | ROAD | Other | 52.9676 | |
| MINYIP | VIC | GEELONG | PORTLAND | WIMPAK | ROAD | Other | 33.1047 | |
| MINYIP | VIC | MELBOURNE | PORTLAND | WIMPAK | ROAD | Other | 36.2970 | |
| MINYIP | VIC | PORTLAND | PORTLAND | WIMPAK | ROAD | NTP | 31.5677 | |
| MITIAMO | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 32.6318 | 3.9661 |
| MITIAMO | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 25.7744 | 3.1326 |
| MURCHISON EAST | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 26.2473 | 3.1901 |
| MURCHISON EAST | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 18.7988 | 2.2848 |
| MURRAYVILLE | VIC | GEELONG | OUTER HARBOR | GRAINCORP | ROAD OR RAIL | Other | 64.0813 | 7.7885 |
| MURRAYVILLE | VIC | MELBOURNE | OUTER HARBOR | GRAINCORP | ROAD OR RAIL | Other | 63.8448 | 7.7598 |
| MURRAYVILLE | VIC | OUTER HARBOR | OUTER HARBOR | GRAINCORP | ROAD | NTP | 34.8782 | |
| MURTOA | VIC | GEELONG | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 33.4594 | 4.0667 |
| MURTOA | VIC | MELBOURNE | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 34.9964 | 4.2535 |
| MURTOA | VIC | PORTLAND | PORTLAND | GRAINCORP | ROAD OR RAIL | NTP | 29.2031 | 3.5494 |
| NANDALY | VIC | GEELONG | MELBOURNE | NANDALY GRAIN | ROAD | Other | 46.7013 | |
| NANDALY | VIC | MELBOURNE | MELBOURNE | NANDALY GRAIN | ROAD | NTP | 45.8737 | |
| NATIMUK | VIC | GEELONG | PORTLAND | GRAINCORP | ROAD | Other | 35.5876 | |
| NATIMUK | VIC | MELBOURNE | PORTLAND | GRAINCORP | ROAD | Other | 38.6616 | |
| NATIMUK | VIC | PORTLAND | PORTLAND | GRAINCORP | ROAD | NTP | 26.9567 | |
| NHILL | VIC | GEELONG | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 42.7997 | 5.2019 |
| NHILL | VIC | MELBOURNE | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 44.8096 | 5.4462 |
| NHILL | VIC | OUTER HARBOR | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 45.0461 | 5.4749 |
| NHILL | VIC | PORTLAND | PORTLAND | GRAINCORP | ROAD OR RAIL | NTP | 29.6760 | 3.6069 |
| NULLAWIL | VIC | GEELONG | MELBOURNE | EMERALD | ROAD OR RAIL | Other | 73.3033 | 8.9094 |
| NULLAWIL | VIC | MELBOURNE | MELBOURNE | EMERALD | ROAD OR RAIL | NTP | 71.8846 | 8.7369 |
| NULLAWIL | VIC | GEELONG | MELBOURNE | ACCESS GRAIN | ROAD | Other | 73.3033 | |
| NULLAWIL | VIC | MELBOURNE | MELBOURNE | ACCESS GRAIN | ROAD | NTP | 71.8846 | |
| NUMURKAH SUTCLIFFE | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD | Other | 33.3412 | |
| NUMURKAH SUTCLIFFE | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD | NTP | 26.9567 | |
| OUYEN | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 53.6770 | 6.5240 |
| OUYEN | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 52.3764 | 6.3659 |
| OUYEN | VIC | OUTER HARBOR | MELBOURNE | GRAINCORP | ROAD | Other | 47.7654 | |

**GTA Carbon Emissions Model****Embodied Carbon Emissions for Silo Transport Movements to Australian Terminal Ports**

| Origin | State | Port | NTP | BHC | Mode | Port Type | Road (CO ₂ -e kg/ freight-tonne) | Rail (CO ₂ -e kg/ freight-tonne) |
|---------------|-------|--------------|--------------|--------------------|--------------|-----------|--|--|
| PIANGIL | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 47.2925 | 5.7480 |
| PIANGIL | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 44.9278 | 5.4606 |
| QUAMBATOOK | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 41.0262 | 4.9864 |
| QUAMBATOOK | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 34.9964 | 4.2535 |
| RAINBOW | VIC | GEELONG | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 45.5190 | 5.5324 |
| RAINBOW | VIC | MELBOURNE | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 48.3566 | 5.8773 |
| RAINBOW | VIC | OUTER HARBOR | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 53.2040 | 6.4665 |
| RAINBOW | VIC | PORTLAND | PORTLAND | GRAINCORP | ROAD OR RAIL | NTP | 37.8340 | 4.5984 |
| ROBINVALE | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD | Other | 57.4604 | |
| ROBINVALE | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD | NTP | 55.6869 | |
| SEA LAKE | VIC | GEELONG | MELBOURNE | AWB | ROAD OR RAIL | Other | 42.6815 | 5.1876 |
| SEA LAKE | VIC | MELBOURNE | MELBOURNE | AWB | ROAD OR RAIL | NTP | 41.9721 | 5.1013 |
| SPEED | VIC | GEELONG | GEELONG | GRAINCORP | ROAD OR RAIL | NTP | 49.0659 | 5.9635 |
| SPEED | VIC | MELBOURNE | GEELONG | GRAINCORP | ROAD OR RAIL | Other | 47.4107 | 5.7623 |
| SPEED | VIC | OUTER HARBOR | GEELONG | GRAINCORP | ROAD | Other | 51.0759 | |
| ST JAMES | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD | Other | 35.8240 | |
| ST JAMES | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD | NTP | 28.3755 | |
| STAWELL | VIC | GEELONG | GEELONG | RIORDANS | ROAD | NTP | 26.4838 | |
| STAWELL | VIC | MELBOURNE | GEELONG | RIORDANS | ROAD | Other | 27.6661 | |
| SUTHERLAND | VIC | GEELONG | GEELONG | GRAINCORP | ROAD | NTP | 27.6661 | |
| SUTHERLAND | VIC | MELBOURNE | GEELONG | GRAINCORP | ROAD | Other | 30.3854 | |
| TANDARA | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD | Other | 24.8285 | |
| TANDARA | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD | NTP | 22.7004 | |
| TATYOON NORTH | VIC | GEELONG | GEELONG | CHS BROADBENT | ROAD | NTP | 17.4982 | |
| TATYOON NORTH | VIC | MELBOURNE | GEELONG | CHS BROADBENT | ROAD | Other | 24.5921 | |
| ULTIMA | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 44.6914 | 5.4318 |
| ULTIMA | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 42.0903 | 5.1157 |
| UNDERBOOL | VIC | GEELONG | OUTER HARBOR | GRAINCORP | ROAD OR RAIL | Other | 58.1697 | 7.0700 |
| UNDERBOOL | VIC | MELBOURNE | OUTER HARBOR | GRAINCORP | ROAD OR RAIL | Other | 56.6327 | 6.8832 |
| UNDERBOOL | VIC | OUTER HARBOR | OUTER HARBOR | GRAINCORP | ROAD | NTP | 41.9721 | |
| WALPEUP | VIC | GEELONG | OUTER HARBOR | VITERRA | ROAD | Other | 55.8051 | |
| WALPEUP | VIC | MELBOURNE | OUTER HARBOR | VITERRA | ROAD | Other | 54.1499 | |
| WALPEUP | VIC | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 44.3367 | |
| WARRACKNABEAL | VIC | GEELONG | PORTLAND | WILKEN | ROAD | Other | 36.6517 | |
| WARRACKNABEAL | VIC | MELBOURNE | PORTLAND | WILKEN | ROAD | Other | 39.7257 | |
| WARRACKNABEAL | VIC | PORTLAND | PORTLAND | WILKEN | ROAD | NTP | 32.3953 | |
| WARRACKNABEAL | VIC | GEELONG | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 38.8981 | 4.7277 |
| WARRACKNABEAL | VIC | MELBOURNE | PORTLAND | GRAINCORP | ROAD OR RAIL | Other | 40.4351 | 4.9145 |
| WARRACKNABEAL | VIC | PORTLAND | PORTLAND | GRAINCORP | ROAD OR RAIL | NTP | 32.0406 | 3.8943 |
| WERNETH | VIC | GEELONG | GEELONG | EMERALD | ROAD | NTP | 9.3876 | |
| WERNETH | VIC | MELBOURNE | GEELONG | EMERALD | ROAD | Other | 17.2618 | |
| WERRIMULL | VIC | GEELONG | OUTER HARBOR | VITERRA | ROAD | Other | 68.1012 | |
| WERRIMULL | VIC | MELBOURNE | OUTER HARBOR | VITERRA | ROAD | Other | 68.9288 | |
| WERRIMULL | VIC | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 42.0903 | |
| WESTMERE | VIC | GEELONG | GEELONG | GRAINCORP | ROAD OR RAIL | NTP | 16.9071 | 2.0549 |
| WESTMERE | VIC | MELBOURNE | GEELONG | GRAINCORP | ROAD OR RAIL | Other | 23.8827 | 2.9027 |
| WESTMERE | VIC | PORTLAND | GEELONG | GRAINCORP | ROAD OR RAIL | Other | 21.1634 | 2.5722 |
| WILLAURA | VIC | GEELONG | PORTLAND | GRAINCORP | ROAD | Other | 21.6363 | |
| WILLAURA | VIC | MELBOURNE | PORTLAND | GRAINCORP | ROAD | Other | 29.3213 | |
| WILLAURA | VIC | PORTLAND | PORTLAND | GRAINCORP | ROAD | NTP | 18.6805 | |
| WOOMELANG | VIC | GEELONG | GEELONG | GRAINCORP | ROAD OR RAIL | NTP | 44.2185 | 5.3744 |
| WOOMELANG | VIC | MELBOURNE | GEELONG | GRAINCORP | ROAD OR RAIL | Other | 41.7356 | 5.0726 |
| WOORINEN | VIC | GEELONG | MELBOURNE | EMERALD | ROAD OR RAIL | Other | 43.2726 | 5.2594 |
| WOORINEN | VIC | MELBOURNE | MELBOURNE | EMERALD | ROAD OR RAIL | NTP | 41.8538 | 5.0870 |
| WYCHEPROOF | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 33.5777 | 4.0811 |
| WYCHEPROOF | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 32.8683 | 3.9948 |
| YARRAWONGA | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 40.7898 | 4.9576 |
| YARRAWONGA | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 33.5777 | 4.0811 |
| YELTA | VIC | GEELONG | MELBOURNE | GRAINCORP | ROAD OR RAIL | Other | 67.6282 | 8.2196 |
| YELTA | VIC | MELBOURNE | MELBOURNE | GRAINCORP | ROAD OR RAIL | NTP | 66.5642 | 8.0903 |
| YELTA | VIC | OUTER HARBOR | MELBOURNE | GRAINCORP | ROAD | Other | 46.7013 | |
| APAMURRA | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 10.3802 | |
| ARDROSSAN | SA | OUTER HARBOR | PORT GILES | VITERRA | ROAD | Other | 18.5914 | |
| ARDROSSAN | SA | PORT GILES | PORT GILES | VITERRA | ROAD | NTP | 9.4149 | |
| ARDROSSAN | SA | WALLAROO | PORT GILES | VITERRA | ROAD | Other | 8.1040 | |
| ARNO BAY | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 13.9436 | |
| BALAKLAVA | SA | OUTER HARBOR | WALLAROO | AUST GROWER DIRECT | ROAD | Other | 22.9533 | |
| BALAKLAVA | SA | OUTER HARBOR | WALLAROO | VITERRA | ROAD | Other | 22.9533 | |
| BALAKLAVA | SA | WALLAROO | WALLAROO | VITERRA | ROAD | NTP | 10.2491 | |
| BOOLEROO | SA | OUTER HARBOR | WALLAROO | VITERRA | ROAD | Other | 30.8666 | |
| BOOLEROO | SA | WALLAROO | WALLAROO | VITERRA | ROAD | NTP | 19.7832 | |
| BORDERTOWN | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 35.5144 | |



GTA Carbon Emissions Model

Embodied Carbon Emissions for Silo Transport Movements to Australian Terminal Ports

| Origin | State | Port | NTP | BHC | Mode | Port Type | Road (CO2-e kg/ freight-tonne) | Rail (CO2-e kg/ freight-tonne) |
|---------------|-------|--------------|--------------|---------------------|--------------|-----------|-----------------------------------|-----------------------------------|
| BOWMANS | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD OR RAIL | NTP | 13.2285 | 1.5439 |
| BOWMANS | SA | PORT GILES | OUTER HARBOR | VITERRA | ROAD | Other | 32.4158 | |
| BOWMANS | SA | WALLAROO | OUTER HARBOR | VITERRA | ROAD | Other | 16.9230 | |
| BUCKLEBOO | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 31.9391 | |
| BUTE | SA | OUTER HARBOR | WALLAROO | VITERRA | ROAD | Other | 17.6380 | |
| BUTE | SA | PORT GILES | WALLAROO | VITERRA | ROAD | Other | 17.9956 | |
| BUTE | SA | WALLAROO | WALLAROO | VITERRA | ROAD | NTP | 4.7670 | |
| COONALPYN | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 22.4051 | |
| CRYSTAL BROOK | SA | OUTER HARBOR | OUTER HARBOR | AWB | ROAD OR RAIL | NTP | 47.9087 | 5.5916 |
| CRYSTAL BROOK | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD OR RAIL | NTP | 47.9087 | 5.5916 |
| CRYSTAL BROOK | SA | PORT GILES | OUTER HARBOR | VITERRA | ROAD | Other | 26.3379 | |
| CRYSTAL BROOK | SA | WALLAROO | OUTER HARBOR | AWB | ROAD | Other | 21.4517 | |
| CRYSTAL BROOK | SA | WALLAROO | OUTER HARBOR | VITERRA | ROAD | Other | 21.4517 | |
| CUMMINS | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 7.6273 | |
| DARKE PEAK | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 22.6434 | |
| EDILLILIE | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 5.6013 | |
| ELLISTON | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 19.9024 | |
| EUDUNDA | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 13.2285 | |
| EUDUNDA | SA | WALLAROO | OUTER HARBOR | VITERRA | ROAD | Other | 24.0735 | |
| FRANCES | SA | PORTLAND | PORTLAND | VITERRA | ROAD | NTP | 27.6488 | |
| FRANCES | SA | OUTER HARBOR | PORTLAND | VITERRA | ROAD | Other | 41.5924 | |
| GLADSTONE | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD OR RAIL | NTP | 24.4311 | 2.8514 |
| GLADSTONE | SA | WALLAROO | OUTER HARBOR | VITERRA | ROAD | Other | 14.1819 | |
| INNER HARBOUR | SA | PORT GILES | OUTER HARBOR | VITERRA | ROAD | Other | 25.6228 | |
| JAMESTOWN | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 25.7420 | |
| JAMESTOWN | SA | WALLAROO | OUTER HARBOR | VITERRA | ROAD | Other | 17.5189 | |
| KAPINNIE | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 10.0108 | |
| KAROONDA | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 20.7366 | |
| KEITH | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD OR RAIL | NTP | 30.1515 | 3.5191 |
| KIMBA | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 25.2653 | |
| KIMBA | SA | PORT LINCOLN | PORT LINCOLN | T-PORTS | ROAD | NTP | 25.2653 | |
| KIMBA | SA | LUCKY BAY | LUCKY BAY | T-PORTS | ROAD | NTP | 12.0368 | |
| LAMEROO | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 27.1721 | |
| LOCK | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 17.1613 | |
| LOCK | SA | PORT LINCOLN | PORT LINCOLN | T-PORTS | ROAD | NTP | 17.1613 | |
| LOCK | SA | LUCKY BAY | LUCKY BAY | T-PORTS | ROAD | NTP | 15.6120 | |
| LOXTON | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 29.3173 | |
| MAITLAND | SA | OUTER HARBOR | WALLAROO | AWB | ROAD | Other | 19.5448 | |
| MAITLAND | SA | PORT GILES | WALLAROO | AWB | ROAD | Other | 10.6067 | |
| MAITLAND | SA | WALLAROO | WALLAROO | AWB | ROAD | NTP | 6.1971 | |
| MALLALA | SA | OUTER HARBOR | OUTER HARBOR | AWB | ROAD OR RAIL | NTP | 7.2697 | 0.8485 |
| MALLALA | SA | WALLAROO | OUTER HARBOR | AWB | ROAD | Other | 32.1775 | |
| MONARTO SOUTH | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 11.1668 | |
| NARACOORTE | SA | PORTLAND | PORTLAND | GRAINCORP | ROAD | NTP | 49.1005 | |
| NARACOORTE | SA | OUTER HARBOR | PORTLAND | GRAINCORP | ROAD | Other | 86.0450 | |
| NARACOORTE | SA | PORTLAND | PORTLAND | TE STORAGE & LOGIST | ROAD | NTP | 49.1005 | |
| NARACOORTE | SA | OUTER HARBOR | PORTLAND | TE STORAGE & LOGIST | ROAD | Other | 86.0450 | |
| NUNJIKOMPITA | SA | PORT LINCOLN | THEVENARD | VITERRA | ROAD | Other | 43.6184 | |
| NUNJIKOMPITA | SA | THEVENARD | THEVENARD | VITERRA | ROAD | NTP | 9.5341 | |
| OUTER HARBOR | SA | PORT GILES | OUTER HARBOR | VITERRA | ROAD | Other | 27.7680 | |
| OWEN | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 10.0942 | |
| OWEN | SA | WALLAROO | OUTER HARBOR | VITERRA | ROAD | Other | 18.9490 | |
| PENONG | SA | PORT LINCOLN | THEVENARD | VITERRA | ROAD | Other | 56.6085 | |
| PENONG | SA | THEVENARD | THEVENARD | VITERRA | ROAD | NTP | 8.9382 | |
| PINNAROO | SA | OUTER HARBOR | OUTER HARBOR | AWB | ROAD | NTP | 64.1166 | |
| PINNAROO | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 64.1166 | |
| PINNAROO | SA | GEELONG | OUTER HARBOR | AWB | ROAD OR RAIL | Other | 138.0057 | 16.1071 |
| PINNAROO | SA | MELBOURNE | OUTER HARBOR | AWB | ROAD OR RAIL | Other | 134.9071 | 15.7454 |
| POOCHERA | SA | PORT LINCOLN | THEVENARD | VITERRA | ROAD | Other | 33.7268 | |
| POOCHERA | SA | THEVENARD | THEVENARD | VITERRA | ROAD | NTP | 17.0422 | |
| PORT GILES | SA | OUTER HARBOR | PORT GILES | VITERRA | ROAD | Other | 26.4570 | |
| PORT GILES | SA | WALLAROO | PORT GILES | VITERRA | ROAD | Other | 16.3271 | |
| PORT NEILL | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 10.3683 | |
| PORT PIRIE | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD OR RAIL | NTP | 27.1721 | 3.1713 |
| PORT PIRIE | SA | WALLAROO | OUTER HARBOR | VITERRA | ROAD | Other | 13.9436 | |
| ROSEWORTHY | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 6.9956 | |
| ROSEWORTHY | SA | WALLAROO | OUTER HARBOR | VITERRA | ROAD | Other | 17.7572 | |
| RUDALL | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 19.5448 | |
| SADDELEWORTH | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 13.3477 | |
| SADDELEWORTH | SA | WALLAROO | OUTER HARBOR | VITERRA | ROAD | Other | 20.0215 | |
| SHEAOAK LOG | SA | OUTER HARBOR | OUTER HARBOR | TREMLETT | ROAD | NTP | 7.5796 | |
| SNOWTOWN | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD OR RAIL | NTP | 17.9956 | 2.1003 |



GTA Carbon Emissions Model

Embodied Carbon Emissions for Silo Transport Movements to Australian Terminal Ports

| Origin | State | Port | NTP | BHC | Mode | Port Type | Road (CO2-e kg/ freight-tonne) | Rail (CO2-e kg/ freight-tonne) |
|-----------------|-------|--------------------|--------------------|---------|--------------|-----------|-----------------------------------|-----------------------------------|
| SNOWTOWN | SA | PORT GILES | OUTER HARBOR | VITERRA | ROAD | Other | 20.2599 | |
| SNOWTOWN | SA | WALLAROO | OUTER HARBOR | VITERRA | ROAD | Other | 7.7464 | |
| STRATHALBYN | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD | NTP | 9.8439 | |
| STREAKY BAY | SA | PORT LINCOLN | THEVENARD | VITERRA | ROAD | Other | 34.9185 | |
| STREAKY BAY | SA | THEVENARD | THEVENARD | VITERRA | ROAD | NTP | 13.5861 | |
| TAILEM BEND | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD OR RAIL | NTP | 14.7778 | 1.7248 |
| THEVENARD | SA | PORT LINCOLN | THEVENARD | VITERRA | ROAD | Other | 48.3854 | |
| TUMBY BAY | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 5.9588 | |
| WALLAROO | SA | OUTER HARBOR | WALLAROO | VITERRA | ROAD | Other | 19.1873 | |
| WALLAROO | SA | PORT GILES | WALLAROO | VITERRA | ROAD | Other | 16.3271 | |
| WARRAMBOO | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 22.1667 | |
| WIRRULLA | SA | PORT LINCOLN | THEVENARD | VITERRA | ROAD | Other | 39.3280 | |
| WIRRULLA | SA | THEVENARD | THEVENARD | VITERRA | ROAD | NTP | 11.5601 | |
| WITERA | SA | PORT LINCOLN | THEVENARD | VITERRA | ROAD | Other | 28.6022 | |
| WITERA | SA | THEVENARD | THEVENARD | VITERRA | ROAD | NTP | 27.8872 | |
| WOLSELEY | SA | OUTER HARBOR | OUTER HARBOR | VITERRA | ROAD OR RAIL | NTP | 37.3021 | 4.3536 |
| WUDINNA | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 25.3845 | |
| WUDINNA | SA | THEVENARD | PORT LINCOLN | VITERRA | ROAD | Other | 25.3845 | |
| YEELANNA | SA | PORT LINCOLN | PORT LINCOLN | VITERRA | ROAD | NTP | 9.2957 | |
| AINSWORTH | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 37.5159 | |
| ALBANY TERMINAL | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | NTP | 0.0000 | 0.0000 |
| ALBANY TERMINAL | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 51.1123 | 5.6285 |
| ALBANY TERMINAL | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 60.8060 | 6.6960 |
| ALDERSYDE | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 25.0526 | |
| ARDATH | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 36.2922 | |
| ARRINO | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Rail | NTP | 0.0000 | 2.2597 |
| ARRINO | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 47.0837 | 5.1849 |
| ARTHUR RIVER | WA | BUNBURY | BUNBURY | BUNGE | ROAD | NTP | 18.8838 | |
| AVON | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 2.1488 |
| BALLIDU | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 4.2283 |
| BALLIDU | WA | GERALDTON TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | Other | 44.6918 | 4.9215 |
| BEACON | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 5.4483 |
| BEAUMONT | WA | ESPERANCE TERMINAL | ESPERANCE TERMINAL | CBH | Road | NTP | 11.8591 | |
| BEAUMONT | WA | ALBANY TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 73.3952 | 8.0823 |
| BEAUMONT | WA | KWINANA TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 99.7067 | 10.9797 |
| BENCUBBIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 4.9908 |
| BINNU | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Road | NTP | 11.7080 | |
| BINNU | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 70.8774 | 7.8050 |
| BODALLIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 5.4621 |
| BOLGART | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 2.3152 |
| BONNIE ROCK | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 49.4102 | |
| BORDEN | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 15.6106 | |
| BORDEN | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 46.4543 | 5.1156 |
| BORDEN | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 46.7060 | 5.1433 |
| BROOKTON | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 3.6045 |
| BROOMEHILL | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Rail | NTP | 0.0000 | 2.3013 |
| BROOMEHILL | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 36.6347 | 4.0342 |
| BROOMEHILL | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 55.1408 | 6.0721 |
| BRUCE ROCK | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 35.2498 | |
| BULLARING | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 31.3472 | |
| BULLFINCH | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 55.3360 | |
| BULYEE | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 27.9481 | |
| BUNJIL | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Road | NTP | 30.5918 | |
| BUNJIL | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 46.3284 | 5.1017 |
| BURRACOPPIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 4.8799 |
| CADOUX | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 4.0481 |
| CALINGIRI | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 2.6340 |
| CANNA | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Rail | NTP | 0.0000 | 2.2736 |
| CANNA | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 55.0149 | 6.0583 |
| CARNAMAH | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Rail | NTP | 0.0000 | 2.8281 |
| CARNAMAH | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 42.0480 | 4.6303 |
| CASCADES | WA | ESPERANCE TERMINAL | ESPERANCE TERMINAL | CBH | Road | NTP | 12.9669 | |
| CASCADES | WA | ALBANY TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 51.8676 | 5.7117 |
| CASCADES | WA | KWINANA TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 78.1791 | 8.6091 |
| CLEARY | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 5.1433 |
| COOROW | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Rail | NTP | 0.0000 | 3.2024 |
| COOROW | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 38.6489 | 4.2560 |
| CORRIGIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 32.2284 | |
| CRANBROOK | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Rail | NTP | 0.0000 | 1.4695 |
| CRANBROOK | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 40.0337 | 4.4085 |
| CRANBROOK | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 59.4212 | 6.5435 |
| CUNDERDIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 3.0222 |



GTA Carbon Emissions Model

Embodied Carbon Emissions for Silo Transport Movements to Australian Terminal Ports

| Origin | State | Port | NTP | BHC | Mode | Port Type | Road (CO2-e kg/ freight-tonne) | Rail (CO2-e kg/ freight-tonne) |
|--------------------|-------|--------------------|--------------------|-------|--------------|-----------|-----------------------------------|-----------------------------------|
| DALE | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 16.1142 | |
| DOODLAKINE | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 3.9372 |
| DOWERIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 25.5561 | |
| DUDININ | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 35.5016 | |
| DULYALBIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 51.9482 | |
| DUMBLEYUNG | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Rail | NTP | 0.0000 | 3.8540 |
| DUMBLEYUNG | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 32.2284 | 3.5490 |
| DUMBLEYUNG | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 57.0292 | 6.2801 |
| DUNN ROCK | WA | ESPERANCE TERMINAL | ESPERANCE TERMINAL | CBH | Road | NTP | 31.5990 | |
| DUNN ROCK | WA | ALBANY TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 37.0123 | 4.0758 |
| DUNN ROCK | WA | KWINANA TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 55.1408 | 6.0721 |
| EAST HYDEN | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 48.5944 | |
| EAST HYDEN | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 45.5730 | 5.0185 |
| EAST HYDEN | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 46.8319 | 5.1572 |
| EJANDING | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | NTP | 26.3115 | 2.8974 |
| ESPERANCE TERMINAL | WA | ESPERANCE TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | NTP | 0.0000 | 0.0000 |
| ESPERANCE TERMINAL | WA | ALBANY TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 60.9319 | 6.7098 |
| ESPERANCE TERMINAL | WA | KWINANA TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 87.2434 | 9.6073 |
| GAIRDNER | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 18.8838 | |
| GAIRDNER | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 57.7846 | 6.3633 |
| GAIRDNER | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 42.0480 | 4.6303 |
| GERALDTON TERMINAL | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | NTP | 0.0000 | 0.0000 |
| GERALDTON TERMINAL | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 57.5328 | 6.3355 |
| GNOWANGERUP | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 18.0026 | |
| GNOWANGERUP | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 41.7962 | 4.6026 |
| GNOWANGERUP | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 49.9792 | 5.5037 |
| GOODLANDS | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 42.7656 | |
| GOODLANDS | WA | GERALDTON TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | Other | 43.4328 | 4.7828 |
| GOODMALLING | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 2.9113 |
| GRASS PATCH | WA | ESPERANCE TERMINAL | ESPERANCE TERMINAL | CBH | Rail | NTP | 0.0000 | 1.0397 |
| GRASS PATCH | WA | ALBANY TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 65.9676 | 7.2644 |
| GRASS PATCH | WA | KWINANA TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 92.5308 | 10.1895 |
| GREENHILLS | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 19.6619 | |
| HINES HILL | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 4.2144 |
| HOLLAND ROCKS | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 29.5847 | |
| HOLLAND ROCKS | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 46.7060 | 5.1433 |
| HOLLAND ROCKS | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 44.8177 | 4.9353 |
| HOLLETON | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 55.4619 | |
| HYDEN | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Rail | NTP | 0.0000 | 6.2385 |
| HYDEN | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 43.3069 | 4.7690 |
| HYDEN | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 48.0909 | 5.2958 |
| JACUP | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 26.5633 | |
| JACUP | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 57.9105 | 6.3771 |
| JACUP | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 34.8722 | 3.8401 |
| JUBUK | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 30.3400 | |
| KALANNIE | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 4.7413 |
| KALANNIE | WA | GERALDTON TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | Other | 44.5659 | 4.9076 |
| KARLGARIN | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Rail | NTP | 0.0000 | 6.0167 |
| KARLGARIN | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 41.2927 | 4.5472 |
| KARLGARIN | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 50.2310 | 5.5315 |
| KATANNING | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Rail | NTP | 0.0000 | 2.5647 |
| KATANNING | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 34.3686 | 3.7847 |
| KATANNING | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 57.7846 | 6.3633 |
| KELLERBERRIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 3.7154 |
| KIRWAN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 4.3531 |
| KIRWAN | WA | GERALDTON TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | Other | 48.2167 | 5.3096 |
| KOJANEERUP | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 10.8771 | |
| KOJANEERUP | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 54.0078 | 5.9474 |
| KOJANEERUP | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 51.3641 | 5.6562 |
| KOJONUP | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 19.7651 | |
| KOJONUP | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 31.5990 | 3.4797 |
| KOJONUP | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 61.1837 | 6.7376 |
| KONDININ | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 38.1454 | |
| KONNONGORRING | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 3.3688 |
| KOORDA | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 4.4501 |
| KUKERIN | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Rail | NTP | 0.0000 | 4.3808 |
| KUKERIN | WA | ALBANY TERMINAL | ALBANY TERMINAL | BUNGE | Rail | NTP | 0.0000 | 4.3808 |
| KUKERIN | WA | BUNBURY | ALBANY TERMINAL | BUNGE | ROAD | Other | 32.7320 | |
| KUKERIN | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 104.7424 | 11.5343 |
| KUKERIN | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | BUNGE | ROAD | Other | 104.7424 | |
| KUKERIN | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 74.7800 | 8.2348 |
| KUKERIN | WA | KWINANA TERMINAL | ALBANY TERMINAL | BUNGE | ROAD | Other | 74.7800 | |



GTA Carbon Emissions Model

Embodied Carbon Emissions for Silo Transport Movements to Australian Terminal Ports

| Origin | State | Port | NTP | BHC | Mode | Port Type | Road (CO2-e kg/ freight-tonne) | Rail (CO2-e kg/ freight-tonne) |
|------------------|-------|--------------------|--------------------|-----|--------------|-----------|-----------------------------------|-----------------------------------|
| KULIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 38.9007 | |
| KWINANA TERMINAL | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | NTP | 0.0000 | 0.0000 |
| LAKE GRACE | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Rail | NTP | 0.0000 | 4.9353 |
| LAKE GRACE | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 40.2855 | 4.4363 |
| LAKE GRACE | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 46.9578 | 5.1710 |
| LAKE KING | WA | ESPERANCE TERMINAL | ESPERANCE TERMINAL | CBH | Road | NTP | 32.9397 | |
| LAKE KING | WA | ALBANY TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 39.7820 | 4.3808 |
| LAKE KING | WA | KWINANA TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 54.6373 | 6.0167 |
| LAKE VARLEY | WA | ESPERANCE TERMINAL | ESPERANCE TERMINAL | CBH | Road | NTP | 37.9528 | |
| LAKE VARLEY | WA | ALBANY TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 43.8105 | 4.8244 |
| LAKE VARLEY | WA | KWINANA TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 49.8533 | 5.4899 |
| LATHAM | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Road | NTP | 32.3543 | |
| LATHAM | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 44.3141 | 4.8799 |
| MARCHAGEE | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Rail | NTP | 0.0000 | 3.4797 |
| MARCHAGEE | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 35.7534 | 3.9372 |
| MAWSON | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 21.9166 | |
| MCLEVIE | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 4.8244 |
| MCLEVIE | WA | GERALDTON TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | Other | 38.2713 | 4.2144 |
| MECKERING | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 2.6756 |
| MERRIDIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 4.4640 |
| MGC | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 0.6377 |
| MILING | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 3.6599 |
| MILING | WA | GERALDTON TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | Other | 39.9079 | 4.3947 |
| MINDARABIN | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 20.1428 | |
| MINDARABIN | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 46.2025 | 5.0878 |
| MINDARABIN | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 45.1953 | 4.9769 |
| MINGENEW | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Rail | NTP | 0.0000 | 1.7606 |
| MINGENEW | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 51.4899 | 5.6701 |
| MIRAMBEENA | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 2.7067 | |
| MIRAMBEENA | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 49.6016 | 5.4621 |
| MOGUMBER | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 2.3290 |
| MOONYOONOOKA | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Road | NTP | 1.5737 | |
| MOONYOONOOKA | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 57.6587 | 6.3494 |
| MOORA | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 2.9252 |
| MOORA | WA | GERALDTON TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | Other | 34.9981 | 3.8540 |
| MOORINE ROCK | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 5.7810 |
| MORAWA | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Rail | NTP | 0.0000 | 2.8143 |
| MORAWA | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 50.1051 | 5.5176 |
| MOULYINNING | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Rail | NTP | 0.0000 | 4.1451 |
| MOULYINNING | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 35.8793 | 3.9510 |
| MOULYINNING | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 54.6373 | 6.0167 |
| MOUNT KOKEBY | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 3.3549 |
| MOUNT MADDEN | WA | ESPERANCE TERMINAL | ESPERANCE TERMINAL | CBH | Road | NTP | 28.3761 | |
| MOUNT MADDEN | WA | ALBANY TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 41.7962 | 4.6026 |
| MOUNT MADDEN | WA | KWINANA TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 58.2881 | 6.4187 |
| MOUNT WALKER | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 44.8630 | |
| MUKINBUDIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 5.5037 |
| MULLEWA | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Rail | NTP | 0.0000 | 1.4834 |
| MULLEWA | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 62.0649 | 6.8346 |
| MUNGLINUP | WA | ESPERANCE TERMINAL | ESPERANCE TERMINAL | CBH | Road | NTP | 14.2145 | |
| MUNGLINUP | WA | ALBANY TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 47.0837 | 5.1849 |
| MUNGLINUP | WA | KWINANA TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 73.7729 | 8.1239 |
| MUNTADGIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 40.8269 | |
| NAREMBEEN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 39.6699 | |
| NARNGULU | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Road | NTP | 2.1528 | |
| NARNGULU | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 56.9033 | 6.2662 |
| NARRAKINE | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 20.2687 | |
| NEMBUDDING | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 31.3170 | |
| NEWDEGATE | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Rail | NTP | 0.0000 | 5.8087 |
| NEWDEGATE | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 46.8319 | 5.1572 |
| NEWDEGATE | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 40.4114 | 4.4501 |
| NORTH KOJONUP | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 21.1499 | |
| NORTHAMPTON | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Road | NTP | 6.7352 | |
| NORTHAMPTON | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 63.9533 | 7.0426 |
| NUNGARIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 38.3405 | |
| NYABING | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 26.1856 | |
| NYABING | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 38.6489 | 4.2560 |
| NYABING | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 51.2382 | 5.6424 |
| ONGERUP | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 19.2615 | |
| ONGERUP | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 48.5944 | 5.3512 |
| ONGERUP | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 43.1811 | 4.7551 |
| PERENJORI | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Rail | NTP | 0.0000 | 3.3549 |



GTA Carbon Emissions Model

Embodied Carbon Emissions for Silo Transport Movements to Australian Terminal Ports

| Origin | State | Port | NTP | BHC | Mode | Port Type | Road (CO ₂ -e kg/ freight-tonne) | Rail (CO ₂ -e kg/ freight-tonne) |
|------------------|-------|--------------------|--------------------|--------------|--------------|-----------|--|--|
| PERENJORI | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 49.0980 | 5.4067 |
| PIAWANING | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 3.0499 |
| PIAWANING | WA | GERALDTON TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | Other | 41.5445 | 4.5749 |
| PINGARING | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Rail | NTP | 0.0000 | 5.5453 |
| PINGARING | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 41.4186 | 4.5610 |
| PINGARING | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 49.7275 | 5.4760 |
| PINGRUP | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 25.1785 | |
| PINGRUP | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 43.8105 | 4.8244 |
| PINGRUP | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 49.6016 | 5.4621 |
| PINTHARUKA | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Road | NTP | 23.9195 | |
| PINTHARUKA | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 53.0007 | 5.8365 |
| PITHARA | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 4.6026 |
| PITHARA | WA | GERALDTON TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | Other | 40.1596 | 4.4224 |
| QUAIRADING | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 25.3044 | |
| RAVENSTHORPE | WA | ESPERANCE TERMINAL | ESPERANCE TERMINAL | CBH | Road | NTP | 24.0354 | |
| RAVENSTHORPE | WA | ALBANY TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 36.8864 | 4.0620 |
| RAVENSTHORPE | WA | KWINANA TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 63.5756 | 7.0010 |
| REGANS FORD | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 22.1570 | |
| REGANS FORD | WA | GERALDTON TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | Other | 36.8864 | 4.0620 |
| SALMON GUMS | WA | ESPERANCE TERMINAL | ESPERANCE TERMINAL | CBH | Rail | NTP | 0.0000 | 1.4141 |
| SALMON GUMS | WA | ALBANY TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 69.6184 | 7.6664 |
| SALMON GUMS | WA | KWINANA TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 96.1817 | 10.5916 |
| SHACKLETON | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 31.0954 | |
| SHARK LAKE | WA | ESPERANCE TERMINAL | ESPERANCE TERMINAL | CBH | Road | NTP | 2.0395 | |
| SHARK LAKE | WA | ALBANY TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 59.4212 | 6.5435 |
| SHARK LAKE | WA | KWINANA TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 86.1103 | 9.4825 |
| SOUTH EAST HYDEN | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 41.1668 | |
| SOUTH EAST HYDEN | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 43.3069 | 4.7690 |
| SOUTH EAST HYDEN | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 46.5801 | 5.1294 |
| SOUTH KUMMININ | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 42.8537 | |
| SOUTHERN CROSS | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 6.1414 |
| TAMMA GRAINS | WA | KWINANA TERMINAL | KWINANA TERMINAL | TAMMA GRAINS | ROAD | NTP | 26.1856 | |
| TAMMIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 3.3411 |
| TRAYNING | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 34.2314 | |
| WAGIN | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Rail | NTP | 0.0000 | 3.2856 |
| WAGIN | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 27.3186 | 3.0083 |
| WAGIN | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 61.9390 | 6.8208 |
| WARRALAKIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 46.5713 | |
| WATERCARRIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | NTP | 27.4445 | 3.0222 |
| WATHEROO | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 3.5074 |
| WATHEROO | WA | GERALDTON TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | Other | 32.4802 | 3.5767 |
| WELLSTEAD | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Road | NTP | 12.7151 | |
| WELLSTEAD | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 56.7774 | 6.2524 |
| WELLSTEAD | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 48.0909 | 5.2958 |
| WEST RIVER | WA | ESPERANCE TERMINAL | ESPERANCE TERMINAL | CBH | Road | NTP | 29.1189 | |
| WEST RIVER | WA | ALBANY TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 31.5990 | 3.4797 |
| WEST RIVER | WA | KWINANA TERMINAL | ESPERANCE TERMINAL | CBH | ROAD OR RAIL | Other | 62.8203 | 6.9178 |
| WIALKI | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 46.7602 | |
| WICKEPIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 30.2142 | |
| WOGARL | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 42.3464 | |
| WOODANILLING | WA | ALBANY TERMINAL | ALBANY TERMINAL | CBH | Rail | NTP | 0.0000 | 2.8558 |
| WOODANILLING | WA | KWINANA TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 31.4731 | 3.4658 |
| WOODANILLING | WA | ESPERANCE TERMINAL | ALBANY TERMINAL | CBH | ROAD OR RAIL | Other | 60.1765 | 6.6267 |
| WUBIN | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 39.5302 | |
| WUBIN | WA | GERALDTON TERMINAL | KWINANA TERMINAL | CBH | ROAD OR RAIL | Other | 36.0052 | 3.9649 |
| WYALKATCHEM | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 3.8263 |
| YEALERING | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 32.3543 | |
| YORK | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Rail | NTP | 0.0000 | 2.7172 |
| YOTING | WA | KWINANA TERMINAL | KWINANA TERMINAL | CBH | Road | NTP | 28.0740 | |
| YUNA | WA | GERALDTON TERMINAL | GERALDTON TERMINAL | CBH | Road | NTP | 10.9023 | |
| YUNA | WA | KWINANA TERMINAL | GERALDTON TERMINAL | CBH | ROAD OR RAIL | Other | 67.3524 | 7.4169 |