## Carbon equivalent calculations

## Equivalent car emissions

| Results from report | Floating/FPSO 158,000-212,000 (in tons) 3,200,000-4,200,000 (in kg) | Fixed <br> 270,000-435,000 (in tons) <br> 5,400,000-8,700,000 (in kg) |  | Average across fixed \& floating |
| :---: | :---: | :---: | :---: | :---: |
| Avg. annual carbon savings in tons | 158,000 212,000 | 270,000 | 435,000 | 323,500 |
| Avg. annual carbon savings in kg | 158,000,000 212,000,000 | 270,000,000 | 435,000,000 |  |
| Life cycle savings in tons | 3,160,000 4,240,000 | 5,400,000 | 8,700,000 |  |
| Annual equivalent no. cars | 79,000 106,000 | 135,000 | 217,500 | 161,750 |
| Life cycle equivalent | 1,580,000 2,120,000 | 2,700,000 | 4,350,000 |  |
| Methodology | Annual -1 car Life cycle-annual <br> produces 2 tons <br> co <br> figure $\times 20$ <br> we have year, sivided the  <br> total CO2 savings in  <br> tons by 2  | Annual-1 car produces 2 tons $\mathrm{CO}_{2}$ each year, so we have divided the total $\mathrm{CO}_{2}$ savings in tons by 2 | Life cycle - annual figure $\times 20$ |  |
| Link to source | What exactly is 1 tonne of $\mathrm{CO}_{2}$ ? We make it tangible. - Climate Neutral Group |  |  |  |
| Narrative of source | 1 car on gasoline driving half a year in NL (average km's per year with passenger car, gasoline: $9,994 \mathrm{~km}$, source CBS, Dutch National Statistics) ${ }^{1}$ |  |  |  |
| Sub-sources | ${ }^{2}$ Calculated with the $\mathrm{CO}_{2}$ calculator that we use for $\mathrm{CO}_{2}$ Footprint calculations. This is based on the Green House Gas Protocol and our up-to-date emission factors, Dutch National emission factors, excl. flying (UK BEIS, formerly DEFRA) |  |  |  |

## Equivalent powering homes

| Results from report | Floating |  | Fixed |  | Average across fixed \& floating |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Avg. annual carbon savings in tons | 158,000.00 | 212,000.00 | 270,000.00 | 435,000.00 | 323,500 |
| Annual equivalent | 102,730.82 | 137,841.35 | 175,552.67 | 282,834.85 | 210,338.10 |
| Life cycle equivalent | 2,054,616.38 | 2,756,827.05 | 3,511,053.32 | 5,656,697.01 |  |
| Methodology | Based on source data, we have calculated that 1 household generates 1.538 $\mathrm{CO}_{2}$ from electricity consumption | 1 ton / 0.65 households = amt. $\mathrm{CO}_{2}$ generated per household / year calculation below | 1.538 | Therefore divide total tons carbon savings by 1.538 |  |
| Link to source | What exactly is 1 tonne of $\mathrm{CO}_{2}$ ? We make it tangible. - Climate Neutral Group |  |  |  |  |
| Narrative of source | Electricity consumption (grey) by 0.65 households in one year in NL (average consumption $\mathrm{HH}: 2765$ kWh, source Milieucentral) ${ }^{2}$ |  |  |  |  |
| Sub-sources | ${ }^{2}$ Calculated with the CO2 calculator that we use for $\mathrm{CO}_{2}$ Footprint calculations. This is based on the Green House Gas Protocol and our up-to-date emission factors, Dutch National emission factors, excl. flying (UK BEIS, formerly DEFRA) |  |  |  |  |

## Equivalent glacier mass

| Results from report | Floating |  | Fixed |  | Average across fixed \& floating |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Avg. annual carbon savings in tons | 158,000.00 | 212,000.00 | 270,000.00 | 435,000.00 | 323,500 |
| Avg. annual carbon savings in kg | 158,000,000 | 212,000,000 | 270,000,000 | 435,000,000 | 323,500,000 |
| Equivalent kilogram glacier mass | 2,528,000,000 | 3,392,000,000 | 4,320,000,000 | 6,960,000,000 | 5,176,000,000 |
| Rounded out figure | 2.5 billion kg | 3.3 billion kg | 4.3 billion kg | 6.9 billion kg | 5 billion kg |
| Link to source | ABB Emission Reference Guide, taken from carbonbrief.org | Global warming to date could 'obliterate' a third of glacier ice - Carbon Brief |  |  |  |
| Narrative of source | 16kg of glacier mass is lost every year per $\mathrm{kg} \mathrm{CO}_{2}$ | The article refers to a study published in Nature Climate Change, by the researchers B. Marzeion, G. Kaser and F. Maussion. |  |  |  |

Other comparisons we can draw, based on other benchmarks

| Results from report |  | Floating |  | Fixed |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Avg. annual carbon savings in tons |  | 158,000.00 | 212,000.00 | 270,000.00 | 435,000.00 |
| Equivalent of up to... | fire extinguishers |  | 106,000,000 |  | 217,500,000 |
|  | number of $500 \mathrm{~m}^{3}$ hot air balloons |  | 212,000 |  | 435,000 |
|  | cubic meters of Cola |  | 1,696 |  | 3,480 |
|  | liters of Cola $(125 \mathrm{~m} 3=125,000)$ |  | 1,696,000 |  | 3,480,000 |
| Narrative of source |  | What exactly is 1 tonne of $\mathrm{CO}_{2}$ ? We make it tangible. - Climate Neutral Group |  | "1 ton of $\mathrm{CO}_{2}$ looks like... $500 \mathrm{CO}_{2}$ fire extinguishers; a $500 \mathrm{~m}^{3}$ hot air balloon; $125 \mathrm{~m}^{3}$ of cola." |  |

Average annual cost savings

| Results from report | Floating | Fixed | Average across both <br> per year |
| :--- | :--- | :--- | :--- |
| OPEX savings | $23,650,000$ | $31,000,000$ | $27,325,000.00$ |
| Production revenue increase | $32,400,000$ | $32,000,000$ | $32,200,000,00$ |
| Net revenue increase | 113,000 | 124,250 | 118,625 |

