**Project Template for Sustainable Infrastructure Projects**

**Description of the Project**

(Please describe the project and what sustainable products were utilised in the construction of the project). Include one or more photos of the project.

**Key Performance Indicators**

(Choose the appropriate KPI’s from the list below to report upon)

Core indicators are the amount of embodied carbon in the materials used, the % of recycled product, the cost and geographic/regional and market availability.

Supplementary indicators include water usage performance, quantity of pollutants other than greenhouse gases, reusability/adaptability/recyclability and practical applicability)

A table should be presented comparing the KPI’s of the sustainable material used with the material conventionally used to show the improved sustainability achieved with this project.

Appendix D of the Sustainable Infrastructure Guidelines provides an overview of all the indicators for each product.

Core Indicator 1 Embodied Carbon

Provide a table comparing the amount of carbon emissions from the product used and the amount from the conventional material used.

e.g. The following shows the comparisons of emissions for the construction of a concrete footpath using low carbon concrete compared to a conventional concrete footpath in the same location.

**Table 7:** Concrete Emissions Comparison

|  |  |  |
| --- | --- | --- |
|  | **Low Carbon Concrete** | **Conventional Concrete** |
| **Concrete** | **Emissions (kgCO2)** | **Emissions (kgCO2)** |
| Cementitious Material | 19060 | 26290 |
| Natural Aggregates | 1980 | 3538 |
| Recycled Aggregates | 1160 | 0 |
| Reinforcement Bar | 2480 | 2610 |
| **TOTAL** | **24680** | **32438** |

In order to calculate the amount of emissions go to Clause 9.7 of the Sustainable Infrastructure Guide and select the sustainable material that is being used and conventional equivalent so that the comparison can be made.

e.g. Clause 9.7.4 provides you with the various amount of embodied carbon for the various products

Embodied carbon in asphalt

| **Product** | **kgCO2/m3** |
| --- | --- |
| Hot mix asphalt | 1013 |
| Warm mix asphalt | 709 |
| Resin-bound porous pavement | 507 |
| Recycled aggregate asphalt | 648 |

You can then determine the amount of actual embodied carbon by multiplying the unit density from the table above by the volume of the material used.

**All Other Indicators**

See Appendix D of the Sustainable Infrastructure Guidelines provides a summary of all the other indicators which can be used to provide the comparisons between the sustainable material compared to the conventional material.

**Other Matters that may be included in the report**

Give consideration to including brief comments on the following items in your summary of the project:

* Availability of the sustainable material
* Any issues that you need to be aware in the use of the product
* Are you planning to use the product again?