**The Simple Sankey**

**Team Members**

**Purpose**

To create a simple Canadian energy flow Sankey that is accessible to the general public.

**Sankey Creation**

SAS was used to groom the CANSIM table 1280016 data to be pulled by C#. C# is the program being used to create the actual Sankey. The output of the SAS program is a CSV files that has the template below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Source | Target | Value | Geo | Year | Tag |
| Energy Production | Energy Available |  |  |  |  |
| Imports | Energy Available |  |  |  |  |
| Other | Energy Available |  |  |  |  |
| Energy Available | Exports |  |  |  |  |
| Energy Available | Canada use |  |  |  |  |
| Energy Available | Non-energy |  |  |  |  |

The values are pulled from CANSIM Table 128-0016 using the configuration below,

|  |  |  |
| --- | --- | --- |
| Variables | Inputs | Comments |
| Energy Production | Total primary energy - Production | Only production of primary energy is included here in order to avoid double counting. |
| Imports | Total primary and secondary energy -Imports |  |
| Other | Total primary and secondary energy - Other Adjustments  **Plus** Total Primary and secondary energy - Inter-products transfers | Other adjustments and inter-product transfers are energy flow that are complex in nature. They have been aggregated and labelled as other for simplicity. |
| Energy Available | Energy Production Plus Imports  **Plus** Adjustments |  |
| Exports | Total primary and secondary energy - Exports |  |
| Canada Use | Total primary and secondary energy – Transformed to electricity by utilities  **Plus** Total primary and secondary energy – Transformed to electricity by industry  **Plus** Total primary and secondary energy – Transformed to coke and manufactured gases  **Plus** Total primary and secondary energy – Transformed to refined petroleum products  **Plus** Total primary and secondary energy – Transformed to steam  **Plus** Total primary and secondary energy – Producer consumption  **Plus** Total primary and secondary energy – Energy use – final demand | In order to simplify the Sankey all energy combusted has been aggregated into one category. |
| Non-energy use | Total primary and secondary energy – Non-energy use |  |