

## Multiplication Factor

The “multiplication factor” shall be provided for each process instance. The “multiplication factor” corresponds to the *amount* of Life Cycle Inventory associated to a process instance that is needed over the full life cycle. In practice, the Life Cycle Inventory of a specific process instance shall be multiplied by the “multiplication factor” to calculate the exact amount needed over the full life cycle.

### Example – Calculation of the Multiplication factor of process instance #3

- Process instance #3 is connected to Process instance #2 (this is also the Reference process instance)
- The multiplication factor of instance #2 is equal to 5, due to the presence of a Scaling Factor = 5.
- The multiplication factor of instance #3 can be calculated through the connection #2→#3.
  - o flow 9f8f445c-e172-49f6-8881-bcf2a9824588 in instance #2 has a value of 0.004
  - o flow 8b675989-edc7-4f86-a0e1-ce4a675346df in instance #3 has a value of 1
  - o the partial multiplication factor #2→#3 is therefore  $0.004/1 = 0.004$
  - o the multiplication factor at full life cycle needs to consider that the partial multiplication factor of instance #2 is equal to 5. Thus the multiplication factor of instance #3 is calculated by: (Multiplication factor of instance #2) x (multiplication factor #2→#3) =  $0.004 \times 5 = 0.02$