

$$\frac{dl\ sistema}{dt} = Iin - Iout + Igen$$

$$Iin = \sum_i^{EnvCat} \sum_j^{Streams} \sum_k^{Component} \propto i \ Mj^{(in)} \ xk,j \ \psi^s \ k,j$$

$$Iout = \sum_i^{EnvCat} \sum_j^{Streams} \sum_k^{Component} \propto i \ Mj^{(out)} \ xk,j \ \psi^s \ k,j$$