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## **What is Sustainability?**

Because of the many interpretations of sustainability, the following are given as the working definitions being used by the Roundtable:

### **The Brundtland Commission**

**“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”**  
--- Brundtland Commission, 1983

### **The Daly Rules for Sustainability**

University of Maryland School of Public Policy professor and former Chief Economist for the World Bank Herman E. Daly (working from theory initially developed by Romanian economist Nicholas Georgescu-Roegen and laid out in his 1971 opus "The Entropy Law and the Economic Process") suggests the following three operational rules defining the condition of ecological (thermodynamic) sustainability:

- 1. Renewable resources such as fish, soil, and groundwater must be used no faster than the rate at which they regenerate.**
- 2. Nonrenewable resources such as minerals and fossil fuels must be used no faster than renewable substitutes for them can be put into place.**
- 3. Pollution and wastes must be emitted no faster than natural systems can absorb them, recycle them, or render them harmless.**

Some commentators have argued that the "Daly Rules," being based on ecological theory and the Laws of Thermodynamics, should perhaps be considered implicit or foundational for the many other systems that are advocated, and are thus the most straightforward system for operationalization of the Bruntland Definition. In this view, the Bruntland Definition and the Daly Rules can be seen as complementary -- Bruntland provides the ethical goal of non-depletion of natural capital, Daly details parsimoniously how this ethic is operationalized in physical terms. The system is rationally complete, and in agreement with physical laws. Other definitions may thus be superfluous, or mere glosses on the immutable thermodynamic reality.

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