Abiotic services are derived from the respective abiotic processes (see term abiotic processes). They are considered part of the natural capital like the biotic ecosystem services. Their equation with the biotic ecosystem services has been and still is debatable. An extensive demand for their inclusion and the unclear distinction between biotic and abiotic in practical application, led to their inclusion into the CICES version 5.1 structures. They are reflected in the same classification layout as the biotic ecosystem services, with the provisioning services describing water use for nutrition, materials or energy even being reassigned to the abiotic services to ensure coherence with natural sciences. The Alpine area has the specificity of delivering a variety of abiotic services such as minerals, salt and sand, but also renewable abiotic energy sources such as wind and hydropower as well as experiential interactions such as caves or rocks.

Concerning abiotic services within the AlpES project different opinions exist: Abiotic outputs of ecosystem services are considered as abiotic outputs of natural capital but not as ecosystem services themselves from an ecosystem point of view. Other opinions accept these outputs as goods and services from ecosystems as also the recent developments of the CICES classification system demonstrate. Within the AlpES project the general approach considers abiotic outputs besides biotic outputs, but explicitly indicating them not as ecosystem services but as "environmental services". The deliverable "Guideline for a common understanding on Ecosystem Services" lists examples on abiotic outputs relevant for the Alpine area, however, the AlpES project does not map or assess them explicitly. An exception is the ecosystem service "Surface water for drinking purposes" (abiotic in CICES v5.1) as the selection was based on CICES v4.3, with water included in the biotic system.

AlpES project