The re-gasification of LNG consists in returning the gas from its liquefied state to its gas state by heating the liquefied raw material. Evaporators of various output volumes, constructions and heating methods are the basic equipments used in the LNG re-gasification facility.

LNG evaporators are divided into the following groups:

- Evaporators with heating to a temperature equivalent to the temperature of the surroundings
    - Evaporators heated by sea or river water (SPV)
    - Evaporators heated by air (ORV)
- Evaporators with heating to a temperature higher than the temperature of the surroundings
    - Evaporators with direct heating:
        - Fire/furnace heating – gas burners
        - Electric heating
    - Evaporators with direct heating with the use of heat carrier:
        - Water steam heaters
        - Water heaters heated by immersed gas burners
        - Isopentane heaters or other energy carriers.

The location, intended purpose and fuel availability (or heating factor) is decisive in selecting the type of evaporators and the LNG re-gasification facility scheme.