Global Horizontal Irradiance/Irradiation (GHI)

GHI is the most important parameter for calculation of PV electricity yield. In simple language, **Global Horizontal Irradiation (GHI) = Direct Horizontal Irradiation (DHI) + Diffuse Horizontal Irradiation (DIF**)

Direct Horizontal Irradiation
DHI is the irradiation component that reaches a horizontal Earth surface without any atmospheric losses due to scattering or absorption.

Diffuse Horizontal Irradiation
DIF is the irradiation component that reaches a horizontal Earth surface as a result of being scattered by air molecules, aerosol particles, cloud particles or other particles. In the absence of an atmosphere there would be no diffuse horizontal irradiation.

Direct Normal Irradiance
DNI is the amount of solar radiation received per unit area by a surface that is always held perpendicular (or normal) to the rays that come in a straight line from the direction of the sun at its current position in the sky. Typically, you can maximize the amount of irradiance annually received by a surface by keeping it normal to incoming radiation. This quantity is of particular interest to concentrating solar thermal installations and installations that track the position of the sun.

Submit the diagram that shows what happens to radiation when it hits the facade of your building and/or enters the space