

Assignment 1 - Energy Function

Alex Reed

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```
#' Function to compute energy produced from a photovoltaic system
#'
#' @param A solar panel area (m2)
#' @param H annual average solar radiation (kWh)
#' @param r panel yield (0-1) (manufacture efficiency - usually around 0.2)
#' @param PR performance ratio (0-1) (accounting for site factors that impact efficiency usually around
#'
#' @return Total energy produced from the photovoltaic system (kWh/year)
#' @export pv_energy
#'
#' @examples
#'
#' # Compute energy produced by a 5 m2 solar panel with 6 kWh/m2 average solar radiation
#' pv_energy(5, 6)
pv_energy <- function(A, H, r = 0.2, PR = 0.75) {
  E <- A * r * H * PR
  return(E)
}
```