

# Prediction of the annual energy yield of a bifacial solar farm

## ECN

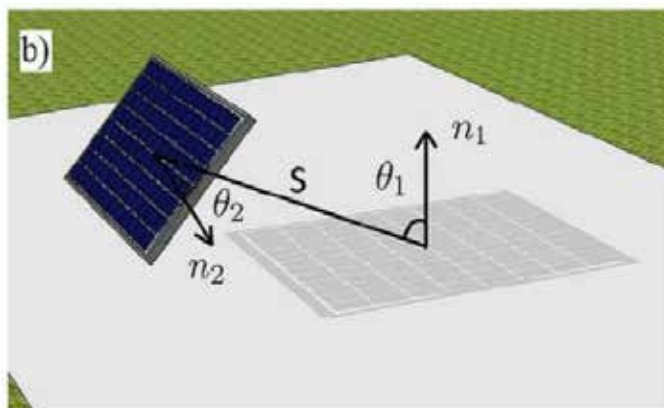
P.O. Box 1  
1755 ZG Petten  
The Netherlands

Contact:  
Ingrid Romijn  
T +31 88 515 43 09  
romijn@ecn.nl

ecn.nl

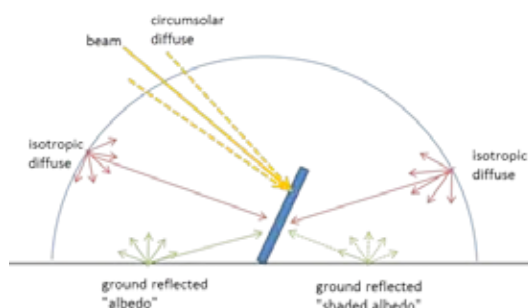
## The technology:

- Irradiance model for bifacial power plants :
  - Shading by modules "in front" (conventional)
  - Self-shading by a row of modules
  - Shading by and reflection from modules behind
  - Angle dependent reflection of direct, diffuse and reflected light on front and rear panels



## ECN offers:

- Accurate prediction of the AEY
- Support in making the correct decisions in designing, executing or financing bifacial solar farms
- Validating irradiance, thermal and electrical model by solar farm data



## Why ECN:

- Most complete optical, thermal and electric model