

Carbon Footprint Calculation

CRE4 method

N°FC01-20210401_001

Applicant:

UAB SOLI TEK CELLS
Mokslininkų g. 6A
LT-08412 Vilnius
Lithuania

Manufacturing site (modules):

UAB SOLI TEK CELLS
Mokslininkų g. 6A
LT-08412 Vilnius
Lithuania

Manufacturing site (cells):

DMEGC CO. LTD.
Dongyang
322118 Zhejiang Province
China

List of products:

Monocrystalline module (Glass/glass): **BLACKSTAR (SOLID Framed), (330-390 Wp in increments of 5W) 2+2mm glass/glass**

Methodology:

Explained at Annex I

Composition of module:

	Module reference
	BLACKSTAR (SOLID Framed) 330-390W
Technology	Monocrystalline Bifacial
Nominal Power in W	360W
Polysilicon (kg)	0,63
Ingots (kg)	0,63
Wafers (nr)	60
Cells (nr)	60
Modules (m ²)	1,86
Glass (front/back) (kg)	9,26 / 9,26
PEO foil (kg)	1,19
PET tape (kg)	0,56

(quantities refer to one module)

Origin of manufacturing site:

	Coefficients / Manufacturing site / Country of manufacturing
	BLACKSTAR (SOLID Framed) 330-390W
Polysilicium	100% Norway (**)
Ingots	100 % Norway (**)
Wafers	100% Norway
Cells	100% China
Modules	100% Lithuania
Glass	50% Germany/ 50% China
PEO foil	100% China
PET tape	100% Germany

(**) these components could not be verified during the factory inspection

KRD Global Group has verified the origin and usage of components during a Factory Inspection performed on 22.12.2020 at Soli Tek facilities.

Results:

	Monocrystalline Bifacial BLACKSTAR (SOLID Framed) 330-390W
Power tolerance (%) 0/+4,99	Average class 360W
G (kg eq CO ₂ /kWc)	393,87

Calculation details:

		Monocrystalline Bifacial BLACKSTAR (SOLID Framed) 330-390W
		Average class 360W
Gi	Polysilicium	53,24
	Lingots	3,18
	Wafers	99,67
	Cellules	69,00
	Modules	45,45
	Glass (front)	46,76
	Glass (back)	59,70
	PEO foil	10,89
	PET tape	5,98
G (kg eq CO2/kWc)		393,87

Information:

Calculations were made on the basis of the default values of the methodology cited in the Annex I except:

- the value of the manufacturing process of "polySi" (Norway)
- the value of the "wafer" component (Norway manufacturing site)
- the value of the "cell" component (China manufacturing site)

Which are a result of estimations made from Life Cycle Assessment (LCA) of these components. The GWPIj (Global Warming Potential) coefficients resulting from LCA are presented in the table below. KRD Global Group Sp. z o.o. recommends to perform a dedicated Life Cycle Assessment on the manufacturers and components mentioned below.

	GWPIj
PolySi (Norway)	2,067
Wafers mono (Norway)	0,537
Cells mono (China)	0,414

As per KRD Global Group knowledge after the Factory Inspection to Soli Tek the model or models of modules to which refers this certificate do not contend any of the harmful components listed in Cradle to Cradle or RoHs standards.

Validity :

Certificate N° FC01-20210401_001 valid from 01/04/2021 to 31/03/2022

Warsaw, 01/04/2021

Technical Director

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