

# Alternative Solar Photovoltaic Technologies: Global Markets-Focus on CIGS

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### **Abstracts**

### Scope of Report:

Topics analyzed within the report include a detailed breakdown and analysis of the global markets for alternative solar PV technologies by geography, technology and application. Additionally, included are a review of the different technologies currently in commercial use; a review of early-stage technologies that are beginning to see transfer from research to commercialization; a sketch of the industry's current structure, including competitive and regulatory analysis within this context; and major factors impelling and impeding global growth. The scope of the report extends to sizing of the alternative solar photovoltaic technologies market and an analysis of global market trends with market data for 2017 being considered as the base year, 2018 as the estimate year and forecast for 2023 with projection of CAGR from 2018 to 2023. Market data is provided in terms of megawatts installed annually and U.S. dollar value at global and regional levels, as well as select countries for alternative solar photovoltaic technologies.

The report focuses on assessment of alternative solar photovoltaic technologies and a detailed analysis of original equipment manufacturers and the related system providers. Market dynamics such as drivers, restraints, opportunities and challenges are also discussed in the report. The study forecasts the market value of the alternative solar photovoltaic technologies market for key technologies like CIS/CIGS, CdTe, a-Si, DSSC and OPV, among others. A deep dive analysis of CIGS technology is done by estimating the market trends for the application and production method segment. The report forecasts the market value of the CIGS alternative solar photovoltaic technologies market for major applications like grid tied applications, off grid applications, portable electronics and consumer products; and other applications like transportation,



aerospace, remote sensing and military. The report also forecasts the market value of the CIGS alternative solar photovoltaic technologies market by production methods that include major manufacturing methods like sputtering, co-evaporation and other methods like electrochemical deposition and printing, among others.

While this report contains a significant amount of technical information due to the inherent nature of the subject and thus provides information valuable to engineers and scientists, it is primarily aimed at business professionals in fields related to alternative solar technologies. These may include manufacturers and their suppliers, financiers and investors, researchers with backgrounds in engineering and sciences, marketing and sales professionals, renewable energy advocates, and others.

This report may also prove valuable to professional analysts, investors, public policy advisors and others who are seeking a better understanding and definition of how alternative solar technologies fit into the broader global solar PV market, the global renewable energies market, the global electric energy market and the global energy market.

Not included in this report, except when inclusion of such information provides context for better understanding of the core topics being discussed, are -

Monocrystalline silicon photovoltaics.

Polycrystalline silicon photovoltaics.

Solar thermal technologies.

Concentrating solar power (as differentiated from concentrating photovoltaics).

Other renewable energy generation technologies such as wind or geothermal.

Report Includes:

79 data tables and 40 additional tables

Country specific data and analysis for United States, Canada, Mexico, Japan, China, India, South Korea, Thailand, Australia, Malaysia, Taiwan, Germany, France, Italy, Spain, U.K., Denmark, and the Netherlands



Coverage of history, components and applications of solar PV systems

Discussion of drivers, restraints, opportunities and challenges of the industry

Details of advancements in alternative photovoltaic technology

Insights of competitive and regulatory analysis and major factors impelling and impeding global growth

Complete understanding of the key technologies like Cadmium Telluride (Cdte), Copper Indium Gallium (Di)selenide (CIS/CIGS) and Amorphous Silicon (A-si)

Company profiles of the major players of the industry, including Ascent Solar Technologies Inc., First Solar Inc., Manz Ag, Showa Shell Sekiyu K.K. (Solar Frontier K.K.) and Hanergy



### **Contents**

### **CHAPTER 1 INTRODUCTION**

Study Background
Study Goals and Objectives
Reasons for Doing the Study
Scope of Report
Methodology
Geographic Breakdown
Analyst's Credentials
BCC Custom Research
Related BCC Research Reports

### **CHAPTER 2 SUMMARY AND HIGHLIGHTS**

### **CHAPTER 3 MARKET OVERVIEW**

Introduction

History of PV Technologies

The Photovoltaic Effect

Silicon and the PV Effect

First-generation PV Technologies

Monocrystalline Silicon Technology

Multi-crystalline Solar Cells

Overview of Alternative Solar PV Technologies

Second-generation Photovoltaics

Third-generation Photovoltaics

Components of Solar PV Systems

Balance of System

Other Costs

Applications of Solar PV Technologies

Building-integrated Photovoltaics (BIPV)

Advancements in Alternative PV Technology

Silicon Nanowires

All-Carbon Solar Cells

Graphene in Solar Cells

Plasmonic Nanostructures



#### **CHAPTER 4 MARKET DYNAMICS**

Introduction

Key Market Growth Drivers

Rising Energy Demand

Rising Thrust to Reduce Dependence on Fossil Fuels for Power Generation

Tax Incentives and Regulatory Assistance for the Growth of Solar PV Technologies

Building-integrated Photovoltaic Applications (BIPVs)

**Key Market Growth Restraints** 

Higher Module Cost and Limited Efficiency of Alternative PV Modules

Dominance of c-Si Modules Across All Applications

**Key Market Growth Opportunities** 

Application in Niche Areas

# CHAPTER 5 GLOBAL MARKET FOR ALTERNATIVE SOLAR PV TECHNOLOGIES BY TYPE

Overview

Life Cycle Assessment (LCA)

Cadmium Telluride (CdTe) Solar PV Technology

Cadmium Telluride (CdTe) Solar PV Technology Market Size

CIGS Solar PV Technology

CIGS Solar PV Technology Market Size

Amorphous Silicon (a-Si) Solar PV Technology

Amorphous Silicon Solar PV Technology Market Size

Other Solar PV Technologies

Concentrated Photovoltaics (CPV)

Perovskite PV cells

Other Solar PV Technologies Market Size

# CHAPTER 6 GLOBAL MARKET FOR CIGS SOLAR PV TECHNOLOGY BY APPLICATION

Overview

Off-grid Building Applications

**Grid-tied Applications** 

Portable Electronics and Customer Products Applications

Other Applications of CIGS Solar PV



# CHAPTER 7 GLOBAL MARKET FOR CIGS SOLAR PV TECHNOLOGY BY PRODUCTION METHOD

Introduction

Sputtering

Co-evaporation

Other Production Methods

CIGS Solar PV Technology Production Methods Market Size

# CHAPTER 8 GLOBAL MARKET FOR ALTERNATIVE SOLAR PV TECHNOLOGIES BY REGION

Introduction

Solar Irradiance

Levelized Cost of Electricity (LCOE)

Global Alternative Solar PV Technologies Market Size

North America

North American Annual Solar PV Installations

North American Alternative Solar PV Technology Market Size by Country

North American Alternative Solar PV Technologies Market Size

North American CIGS Solar PV Technology Application Market Size

United States

Rest of North America

Asia-Pacific

Asia-Pacific Annual Solar PV Installations

Asia-Pacific Alternative Solar PV Technologies Market Size by Country

Asia-Pacific Alternative Solar PV Technologies Market by Type

Asia-Pacific CIGS Solar PV Technology Market Size by Application

Japan

India

China

Rest of Asia-Pacific

Europe

European Annual Solar PV Installations

Europe Alternative Solar PV Technologies Market Size by Country

European Alternative Solar PV Technologies Market Size by Type

European CIGS Solar PV Technology Market Size by Application

Germany

Rest of Europe



Rest of the World

Rest of the World Annual Solar PV Installations

Rest of the World Alternative Solar PV Technologies Market Size by Type

Rest of the World CIGS Solar PV Technology Market Size by Application

### **CHAPTER 9 COMPETITIVE LANDSCAPE**

Industry Overview
Market Share Analysis
Market Strategy Analysis
Key Market Developments

### **CHAPTER 10 COMPANY PROFILES**

ANTEC SOLAR GMBH

ASCENT SOLAR TECHNOLOGIES INC.

**Products Offered** 

Financials

Recent Developments

**AVANCIS GMBH** 

**Products Offered** 

Recent Developments

FIRST SOLAR INC.

**Products Offered** 

Financials

Recent Developments

FLISOM AG

Recent Developments

GLOBAL SOLAR INC.

Recent Developments

HANERGY THIN-FILM POWER GROUP LTD.

**Products Offered** 

Financials

Recent Developments

**HELIATEK GMBH** 

**HELIOTROP SAS** 

**HELIOVOLT** 

KANEKA CORP.

Recent Developments



MANZ AG

**Products Offered** 

**Financials** 

Recent Developments

MIASOLE HI-TECH CORP.

MICROLINK DEVICES INC.

Recent Developments

MIDSUMMER AB

MOSER BAER INDIA LTD.

NANOSOLAR INC.

**ONYX SOLAR ENERGY** 

**OPVIUS GMBH** 

Recent Developments

OXFORD PHOTOVOLTAICS LTD.

SHOWA SHELL SEKIYU K.K. (SOLAR FRONTIER K.K.)

**Products Offered** 

**Financials** 

Recent Developments

SIVA POWER INC.

Recent Developments

SOITEC

SOLAR JUNCTION CORP.

SOLARMER ENERGY INC.

SOLARONIX SA

SOLARWORLD INDUSTRIES GMBH

**SOLIBRO GMBH** 

Recent Developments

SOLOPOWER SYSTEMS INC.

Recent Developments

SUNSHINE PV CORP.

**WURTH GROUP** 

**Recent Developments** 

#### **CHAPTER 11 APPENDIX: ACRONYMS**

Report Sources



### **List Of Tables**

### LIST OF TABLES

Summary Table: Global Market for Alternative Solar PV Technologies, by Type, Through 2023

Table 1: Band Gap Energy Values of Semiconductors Used in PV Cells (eV)

Table 2: Elements Common to All PV Cells

Table 3: Electricity Access, by Region, 2016 and Targets

Table 4: Global Electricity Generation, by Region 2012-2017

Table 5: Global Net Electricity Generation, by Fuel, 2016-2040

Table 6: Targets for 100% of Total Electricity from Renewables

Table 7: Annual Solar PV Capacity Additions

Table 8: Renewable Power Targets for Specific Amount of Installed Capacity or Generation

Table 9: 2017 FIT Policy Adjustments

Table 10: Comparison of Global Alternative Solar PV Thin-film Technologies

Table 11: Life Cycle Assessment of Different Types of PV Modules.

Table 12: Global Market Volumes of Alternative Solar PV Technologies, by Type,

Through 2023

Table 13: Global Market for Alternative Solar PV Technologies, by Type, Through 2023

Table 14: Average Cost of Alternative Solar PV Modules, by Type, 2018 and 2023

Table 15: Global Market Volumes of CdTe Solar PV Technology, by Region, Through 2023

Table 16: Global Market for CdTe Solar PV Technology, by Region, Through 2023

Table 17: Global Market Volumes of CIGS Solar PV Technology, by Region, Through 2023

Table 18: Global Market for CIGS Solar PV Technology, by Region, Through 2023

Table 19: Global Market Volumes of Amorphous-Si Solar PV Technology, by Region, Through 2023

Table 20: Global Market for Amorphous-Si Solar PV Technology, by Region, Through 2023

Table 21: Description of Concentrated PV Classes

Table 22: Global Market Volumes of Other Solar PV Technologies, by Region, Through 2023

Table 23: Global Market for Other Solar PV Technology, by Region, Through 2023

Table 24: Manufacturing Costs of Modules for CIGS Solar PV Technology for Different Applications, 2018 and 2023

Table 25: Global Market Volumes of CIGS Solar PV Technology, by Application,



Through 2023

Table 26: Global Market for CIGS Solar PV Technology, by Application, Through 2023

Table 27: Global Market Volumes of CIGS Solar PV Technology in Off-Grid Building

Applications, by Region, Through 2023

Table 28: Global Market for CIGS Solar PV Technology in Off-Grid Building

Applications, by Region, Through 2023

Table 29: Global Market Volumes of CIGS Solar PV Technology in Grid-tied

Applications, by Region, Through 2023

Table 30: Global Market for CIGS Solar PV Technology in Grid-tied Applications, by

Region, Through 2023

Table 31: Global Market Volumes of CIGS Solar PV Technology in Portable Electronics

and Customer Products Applications, by Region, Through 2023

Table 32: Global Market for CIGS Solar PV Technology in Portable Electronics and

Customer Products Applications, by Region, Through 2023

Table 33: Global Market Volumes of CIGS Solar PV Technology in Other Applications,

by Region, Through 2023

Table 34: Global Market for CIGS Solar PV Technology in Other Applications, by

Region, Through 2023

Table 35: Global Market Volumes of CIGS Solar PV Technology, by Production Method,

Through 2023

Table 36: Global Market for CIGS Solar PV Technology, by Production Method,

Through 2023

Table 37: Annual Global Horizontal Irradiance and Direct Normal Irradiance for WEC

Geo-Regions

Table 38: Global Market Volumes of Alternative Solar PV Technologies, by Region,

Through 2023

Table 39: Global Market for Alternative Solar PV Technologies, by Region, Through

2023

Table 40: North American Annual Installed Solar PV Power, 2012-2017

Table 41: North American Market Volumes of Alternative Solar PV Technologies, by

Country, Through 2023

Table 42: North American Market for Alternative Solar PV Technologies, by Country,

Through 2023

Table 43: North American Market Volumes of Alternative Solar PV Technologies, by

Type, Through 2023

Table 44: North American Market for Alternative Solar PV Technologies, by Type,

Through 2023

Table 45: North American Market Volumes of CIGS Solar PV Technology, by

Application, Through 2023



Table 46: North American Market for CIGS Solar PV Technology, by Application, Through 2023

Table 47: Revised U.S. Feed-in-Tariffs, 2018-2021

Table 48: U.S. Market Volumes of Alternative Solar PV Technologies, by Type, Through 2023

Table 49: U.S. Market for Alternative Solar PV Technologies, by Type, Through 2023

Table 50: Rest of the North American Market Volumes of Alternative Solar PV

Technologies, by Type, Through 2023

Table 51: Rest of North American Market for Alternative Solar PV Technologies, by Type, Through 2023

Table 52: Asia-Pacific Annual Installed Solar PV Power, 2012-2017

Table 53: Asia-Pacific Market Volumes of Alternative Solar PV Technologies, by Country, Through 2023

Table 54: Asia-Pacific Market for Alternative Solar PV Technologies, by Country, Through 2023

Table 55: Asia-Pacific Market Volumes of Alternative Solar PV Technologies, by Type, Through 2023

Table 56: Asia-Pacific Market for Alternative Solar PV Technologies, by Type, Through 2023

Table 57: Asia-Pacific Market Volumes of CIGS Solar PV Technology, by Application, Through 2023

Table 58: Asia-Pacific Market for CIGS Solar PV Technology, by Application, Through 2023

Table 59: Japanese Market Volumes of Alternative Solar PV Technologies, by Type, Through 2023

Table 60: Japanese Market for Alternative Solar PV Technologies, by Type, Through 2023

Table 61: Indian Market Volumes of Alternative Solar PV Technologies, by Type, Through 2023

Table 62: Indian Market for Alternative Solar PV Technologies, by Type, Through 2023

Table 63: China's New Solar PV FIT Policy

Table 64: Chinese Market Volumes of Alternative Solar PV Technologies, by Type, Through 2023

Table 65: Chinese Market for Alternative Solar PV Technologies, by Type, Through 2023

Table 66: Rest of Asia-Pacific Market Volumes of Alternative Solar PV Technologies, by Type, Through 2023

Table 67: Rest of Asia-Pacific Market for Alternative Solar PV Technologies, by Type, Through 2023



Table 68: European Annual Installed Solar PV Power, Germany vs. the Rest of Europe, 2012-2017

Table 69: European Market Volumes of Alternative Solar PV Technologies, by Country, Through 2023

Table 70: European Market for Alternative Solar PV Technologies, by Country, Through 2023

Table 71: European Market Volumes of Alternative Solar PV Technologies, by Type, Through 2023

Table 72: European Market for Alternative Solar PV Technologies, by Type, Through 2023

Table 73: European Market Volumes of CIGS Solar PV Technology, by Application, Through 2023

Table 74: European Market for CIGS Solar PV Technology, by Application, Through 2023

Table 75: German Market Volumes of Alternative Solar PV Technologies, by Type, Through 2023

Table 76: German Market for Alternative Solar PV Technologies, by Type, Through 2023

Table 77: Rest of European Market Volumes of Alternative Solar PV Technologies, by Type, Through 2023

Table 78: Rest of European Market for Alternative Solar PV Technologies, by Type, Through 2023

Table 79: Rest of the World Annual Installed Solar PV Capacity, 2012-2017

Table 80: Rest of the World Market Volumes of Alternative Solar PV Technologies, by Type, Through 2023

Table 81: Rest of the World Market for Alternative Solar PV Technologies, by Type, Through 2023

Table 82: Rest of the World Market Volumes of CIGS Solar PV Technology, by Application, Through 2023

Table 83: Rest of the World Market for CIGS Solar PV Technology, by Application, Through 2023

Table 84: Contracts and Agreements, 2014-2018

Table 85: New Product Developments, 2014-2018

Table 86: Expansions, 2014-2018

Table 87: Mergers and Acquisitions, 2017-2018

Table 88: Other Developments, 2014-2018

Table 89: Ascent Solar Technologies Inc.: Products Offered

Table 90: Ascent Solar Technologies Inc.: Company Financials, 2015-2017

Table 91: Ascent Solar Technologies Inc.: Recent Developments



Table 92: AVANCIS GmbH: Products Offered

Table 93: AVANCIS GmbH: Recent Developments

Table 94: First Solar Inc.: Products Offered

Table 95: First Solar Inc.: Company Financials, 2015-2017

Table 96: First Solar: Recent Developments

Table 97: Flisom AG: Recent Developments

Table 98: Global Solar Energy Inc.: Recent Developments

Table 99: Hanergy Thin-film Power Group Ltd.: Products Offered

Table 100: Hanergy Thin-film Power Group Ltd.: Company Financials, 2015-2017

Table 101: Hanergy Thin-film Power Group Ltd.: Recent Developments

Table 102: Heliatek GmbH: Recent Developments

Table 103: Kaneka Corp.: Recent Developments

Table 104: Manz AG: Products Offered

Table 105: Manz AG: Company Financials, 2015-2017

Table 106: Manz AG: Recent Developments

Table 107: MicroLink Devices Inc.: Recent Developments

Table 108: Midsummer AB: Recent Developments

Table 109: OPVIUS GmbH: Recent Developments

Table 110: Oxford Photovoltaics Ltd.: Recent Developments

Table 111: Showa Shell Sekiyu K.K., (Solar Frontier K.K.): Products Offered

Table 112: Showa Shell Sekiyu K.K., (Solar Frontier K.K.): Company Financials,

2015-2017

Table 113: Solar Frontier K.K.: Recent Developments

Table 114: Siva Power Inc.: Recent Developments

Table 115: Solibro GmbH: Recent Developments

Table 116: Solopower Systems Inc.: Recent Developments

Table 117: W?rth Group: Recent Developments

Table 118: Acronyms Used in the Alternative Solar PV Technology Industry

Table 119: Report Sources



## **List Of Figures**

### LIST OF FIGURES

Summary Figure: Global Market for Alternative Solar PV Technologies, by Type, 2017-2023

Figure 1: Global Electricity Generation Share, by Region 2012-2017

Figure 2: Global Net Electricity Generation Share, by Fuel, 2016-2040

Figure 3: Annual Solar PV Capacity Additions

Figure 4: Global Market for Alternative Solar PV Technologies, by Type, 2017-2023

Figure 5: Global Market for CdTe Solar PV Technology, by Region, 2017-2023

Figure 6: Global Market for CIGS Solar PV Technology, by Region, 2017-2023

Figure 7: Global Market for Amorphous-Si Solar PV Technology, by Region, 2017-2023

Figure 8: Global Market for Other Solar PV Technologies, by Region, 2017-2023

Figure 9: Global Market for CIGS Solar PV Technology, by Application, 2017-2023

Figure 10: Global Market for CIGS Solar PV Technology, by Production Method, 2017-2023

Figure 11: Global Market for Alternative Solar PV Technologies, by Region, 2017-2023

Figure 12: North American Share of Annual Installed PV Power, the U.S. vs. the Rest of North America, 2017

Figure 13: North American Market for Alternative Solar PV Technologies, by Type, 2017-2023

Figure 14: North American Market for CIGS Solar PV Technology, by Application, 2017-2023

Figure 15: U.S. Market for Alternative Solar PV Technologies, by Type, 2017-2023

Figure 16: Asia-Pacific Shares of Annual Installed PV Power, by Country, 2017

Figure 17: Asia-Pacific Market for Alternative Solar PV Technologies, by Type, 2017-2023

Figure 18: Asia-Pacific Market for CIGS Solar PV Technology, by Application, 2017-2023

Figure 19: Japanese Market for Alternative Solar PV Technologies, by Type, 2017-2023

Figure 20: Indian Market for Alternative Solar PV Technologies, by Type, 2017-2023

Figure 21: Chinese Market for Alternative Solar PV Technologies, by Type, 2017-2023

Figure 22: Rest of Asia-Pacific Market for Alternative Solar PV Technologies, by Type, 2017-2023

Figure 23: European Shares of Annual Installed PV Power, Germany vs. The Rest of Europe, 2017

Figure 24: European Market for Alternative Solar PV Technologies, by Type, 2017-2023

Figure 25: European Market for CIGS Solar PV Technology, by Application 2017-2023



Figure 26: German Market for Alternative Solar PV Technologies, by Type, 2017-2023

Figure 27: Rest of European Market for Alternative Solar PV Technologies, by Type, 2017-2023

Figure 28: Rest of the World Annual Installed Solar PV Capacity, 2012-2017

Figure 29: Rest of the World Market for Alternative Solar PV Technologies, by Type, 2017-2023

Figure 30: Rest of the World Market for CIGS Solar PV Technology, by Application, 2017-2023

Figure 31: Global Alternative Solar PV Technologies Market Share, by Company, 2017

Figure 32: Key Market Strategies Adopted by Companies, 2014-2018

Figure 33: First Solar Inc.: Revenue Share, by Business Segment, 2017

Figure 34: First Solar Inc.: Revenue Share, by Region, 2017

Figure 35: Hanergy Thin-film Power Group Ltd.: Revenue Share, by Business Segment, 2017

Figure 36: Hanergy Thin-film Power Group Ltd.: Revenue Share, by Region, 2017

Figure 37: Manz AG: Revenue Share, by Business Segment, 2017

Figure 38: Manz AG: Revenue Share, by Region, 2017

Figure 39: Showa Shell Sekiyu K.K., (Solar Frontier K.K.): Revenue Share, by Business

Segment, 2017



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