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## Company's Vision:

## The Leader of Solar Technology in Southeast Asia

### Company's Mission:

SOLARTRON ran 3 years of business with the balance between "Worth" and "Value" for Shareholders, Employees, Stakeholders, Community and the Environment, Resulting in numerous corporate social responsibility awards and social acceptance.

## Quality Policy: Corporate Social Responsibility (CSR)

## "We are committed to creating sustainable energy for customer"

Solartron determine in improving the social corporate responsibility to continue commitment by business and contribute the economic development while improving the quality of life of the workforce and their families as well as of the community and society at large.

## Labor and Social Accountability Policy

Solartron aim on Labor and Accountability improvement and ensure for the better quality of living standard of Labor Social over the period of year.

Solartron is committed to its policy of conducting activities without making undue impacts on its own personnel and properties, those of its contractors, the public, and the ecology alike.

## To aid continuous improvement, the Company promotes

- 1. Commitment to research and develop Solar Technology.
- 2. Commitment to increase the capabilities of employees.
- 3. Commitment to satisfy customers.

These commitments encourage open and honest communication, the exchange of ideas, teamwork and collaboration, an involved and supportive leadership in all business dealings.

## Safety and Environmental Policy

Solartron recognizes occupational health, Safety and Environment Management System. Safety and Environment are the heart of our products and services. We are committed to deliver the best of Safety and Environmental products and services to our customers and stakeholders.

## Standards that SOLARTRON is having:

### 1. Factory management (UKAS, NAC, The Ministry of Labour of Thailand surveillance audit is required)

- > ISO 9001:2008 Operation (receiving inspection, QC inspection, process inspection, final inspection) SGS, obtained.
- ▶ ISO 14001:2004 SGS, obtained.
- TIS 18001:1999 SGS, obtained.
- > OHSAS18001:2007 SGS, obtained.
- TLS 8001:2003 (Thai Labour Standard)

The Department of Labour Protection and Welfare, The Ministry of labour, obtained.

## 2. Product (TUV: annual surveillance audit is required)

- TUV Rheinland (Germany), IEC 61215 Edition 2, IEC61730, obtained.
- TISI (Thai Standard), TIS 1843:2542, IEC61215 Edition 1, obtained.
- CE Mark (EU): product certification for export to EU, obtained Directive 89/336/EEC: Electromagnetic computability. RoHS (EU): product certification for EU, obtained.
- 3. Corporate Social Responsibility: Standard for Corporate Social Responsibility (CSR-DIW)

## Financial Highlight

(Unit: Million Baht, except earnings per Share)

Operation Results	2012	2011	2010
Total Revenues	1,181.01	1,268.24	222.66
Revenues from sales and services	1,153.94	1,266.70	220.72
Gross Margin	243.11	94.33	2.80
Net profit(loss)	171.32	29.29	(40.57)
EBIT	181.02	36.73	(37.14)
EBITDA	193.03	47.86	(26.20)
Financial Status			
Total assets	2,407.09	1,857.55	1,222.83
Total liabilities	1,173.32	879.13	465.19
Total shareholders' equity	1,233.77	978.42	757.63
Financial Ratio			
Liquidity ratio	1.43	1.65	1.10
Total debt to equity ratio	0.95	0.90	0.61
Gross margin ratio	21.07	7.45	1.27
Profit from operation ratio	15.69	2.90	(16.83)
Net profit ratio	14.85	2.31	(18.22)
Return on Assets	8.03	1.90	(3.84)
Return on Equity	15.49	3.37	(5.21)
Earnings per share*	0.38	0.09	(0.14)
	Average 446,602,752 shares	Average 327,700,255 shares	Average 300,000,000shares

**Remark** \* Baht per Share

## Message from Chairman of the Board Directors Message from Chief Executive Officer



To: All Shareholder

The year 2012 was another in which the Brand of Directors, the management and employees of Solartron Public Company Limited can rightfully take pride. With the success attained in goal achievement and excellent performance with 485% increase of net profit of year 2011 and progress made in solar cell factory project. We have laid a firm foundation for futures competitive mass and business expansion.

Despite the highly volatile domestic and global economic conditions during the year, this had repercussions through the energy industry, Solartron still posted in high net profit and offering the gaining to our Shareholder at 0.05 baht per share. Such outstanding performance illustrates the company's robust capability and business competitiveness.

Mr. Cherdpong Siriwit

Chairman of the Board of Directors Solartron Public Company Limited

## Message from Chairman of the Board Directors Message from Chief Executive Officer



Besides this performance, we have kept moving ahead with full commitment to project development and activity engagement to enhance our capability in future. Along the path toward business goal achievement, Solartron has maintained its stewardship of the environment and social duties. This we have done through project and activities at the community level around the rural area.

The Company would like to thank you our Shareholder, Financial Institution Business Partner and employee for all fully support consistently, we determine to follow the good governance policy as well as encouraging the Government Policy in developing the Solar Power Energy Industrial until reach a sustainable of the Company.



Mrs.Patama Wongtoythong
Chief Executive Officer
Solartron Public Company Limited

## Message from the Audit Committee

Audit Committee Report for 2012 To the Shareholders:

The Audit Committee ("the Committee") consists of three independent directors, Ms. Rawittha Pongnuchit (the Chairman), Mr. Suchat Trisirivattwat, and Ms.Romchalee Chanprasit. All the Committee's members meet the requirements of qualifications set by the Stock Exchange of Thailand. The Committee discharges its duties as set forth in the Audit Committee Charter approved by the Board of Directors.

During the fiscal year 2012, the Committee held a total of four meetings with the Company's management, the internal auditors and the external auditors, and also met privately with the external auditors without the presence

of the Company's management. All the Committee's members attended these meetings. The Committee reported on its performance to the Board of Directors on a quarterly basis and made recommendations for necessary actions to be taken by the Company. The Committee's significant activities are summarized below.

**Financial Statements**: The Committee reviewed the Company's quarterly and annual financial statements for the year 2012 including disclosure of information in the notes to financial statements, which had already been reviewed and audited by the external auditors. The Committee also discussed significant accounting policies, estimates and judgments applied in preparing these reports with the Company's management and the external auditors. The management has the primary responsibility for the preparation of financial statements and internal control over financial reporting, while the external auditors are responsible for expressing an opinion on the financial statements.

**Risk Management and Internal Controls Systems**: The Committee reviewed the risk management system including the actions taken to mitigate significant risks to acceptable levels in order to achieve the Company's objectives. The Company has disclosed these risks in the Annual Report for 2012. The Committee reviewed the evaluation results for its internal controls system, which had been prepared by the Company's management based on guidelines from the Capital Market Supervisory Board. The Committee also reviewed the evaluation results from the internal auditor and external auditor regarding the effectiveness of the Company's internal controls system, including the remedial actions taken by the management.

Internal Audit: The Committee reviewed and approved the audit scope and audit plan for 2012 along with the quarterly internal audit results and the progress made. In addition, the Committee reviewed the Internal Audit Department's independence, annual budget and manpower, and evaluated the performance of the Head of Internal Audit.

Regulatory Compliance: The Committee reviewed the Company's compliance with the law on securities and exchange, the Stock Exchange of Thailand's regulations, and the laws pertaining to the Company's business operations.

Corporate Governance: The Committee reviewed and amended the Company's corporate governance policy and code of conduct to align them with best practices and regulatory guidelines suitable for the current business environment and ownership structure.

Whistleblowing: The Committee reviewed the whistle blowing report, which had been obtained through reporting channels under the Misconduct and Fraud Reporting Policy. No cases of misconduct or fraud at the Company were reported to the Committee during 2012.

External Auditor: The Committee considered the external auditors' independence, performance, experience and qualifications, along with the appropriateness of the audit fees. The Committee also considered the auditors' rotation and consequently recommended that the Board of Directors propose the appointment of auditors from Pitisevi Company Ltd. as the Company's external auditors for 2013 at the annual general meeting of shareholders. The Committee and the other audit committees in the group worked together to establish the external auditor selection policy. In addition, the Committee reviewed the external auditors' independence in providing audit and non-audit services to ensure that it had not been impaired.

Connected Transactions: The Committee reviewed the reasonability and the maximum benefits of connected transactions and transactions that might have led to a conflict of interest, including the accuracy and adequacy of disclosures in compliance with related laws and stock exchange regulations.

Audit Committee Self-Assessment: The Committee conducted a self-assessment to review and evaluate its performance by benchmarking it with the Audit Committee Charter and best practice guidelines. The review concluded that the Committee had been effective in carrying out its duties and had followed the terms of reference in its charter. In conclusion, the Committee believes that it completely discharged its duties in the year 2012 with the utmost care and independence. The Committee also believes that the Company's financial statements were accurately prepared in all material respects under generally accepted accounting principles. The Company's disclosures of information were adequate, complete and reliable. The Company's internal controls and risk management systems are both adequate and effective. In addition, the Company complied with all related laws and regulations without material flaw and practiced good corporate governance throughout the year.

Mrs.Rawittha Pongnuchit Chairman of Audit Committee Solartron Public Company Limited

## Mr.Cherdpong Siriwit Chairman of the Board of Directors



## **Academic Background**

Master Degree M.A. Economics Georgetown University, U.S.A. Bachelor Degree B.A. Economics, (Honor), Thammasat University

Work Experience Present >> Chairman of the Board of Directors, Solartron PCL. Present >> Independent Director, Chairman of the Audit Committee, IRPC PCL. >> Director/Audit Committee, Advance Finance PCL. 2009 - Present >> Independent Director/Audit Committee/Nomination 2006 - 2009 Committee PTT Chemical PCL. 2005 >> Permanent Secretary of Energy, Ministry of Energy 2002 >> Deputy Permanent Secretary of Industry, Ministry of Industry. >> Secretary General of Thai Industrial Standard Institute. 2001 - 2002>> Director General of Department of Mineral Resource, 2000 - 2001Ministry of Industry **Training Program** 

- >> Audit Committee Program (ACP) Class 27/2009 >> Director Certification Program (DCP), Class 104/2008 >> Finance for Non-Finance Directors (FND), Class 13/2004 >> Role of the Chairman Program (RCP), Class 10/2004 >> Director Accreditation Program (DAP), Class 8/2004 Thai Institute of Directors (IOD)
- >> Capital Market Academy Leadership Program, Capital market Academy (CMA) Class 5
- >> Politics and Governance in Democratic System for Executives Class of 5, King Prajadhipok's Institute

#### **Number of Shares held** >> -0-

# Mrs.Patama Wongtoythong Chief Executive Officer Deputy Chairman of the Board and the company secretary



## **Academic Background**

Master Degree Master of Business Administration (Finance, Policy and Planning)

University of Missouri, U.S.A.

Bachelor Degree Bachelor of Business Administration (Accounting),

Thammasat University

**Work Experience** 

2008 – Present >> Deputy Chairman of the Board And The Company Secretary

Chief Executive Officer, Solartron PCL

>> Deputy Chief Executive Officer, Solartron PCL

2005 – 2006 >> Chief Financial Officer, Solartron PCL 2000 – 2008 >> Managing Director, B.M.S. Co., Ltd.

**Training Program** 

>> DAP54/2005 Thai Institute of Directors Association (IOD)

>> Financial Restructuring & Corporate Recovery, Organized by world Bank and the Office of Corporate Debt Restructuring

**Advisory Committee** 

>> Senior EXECUTIVE Development Program

>> Full Scale Internal Auditing and Control Program

>> Future and Derivatives for Investor

Number of Shares held >> -0-

## Mr.Akaradej Rojmeta Director



## **Academic Background**

Master Degree Master of Business Administration, Tarleton University, Texas, U.S.A.
Bachelor Degree Bachelor of Business Administration, Thammasat University

## **Work Experience**

2004 – Present	>> Director, Solartron PCL
2006 – Present	>> Executive Director, Netbay co., Ltd.
2007	>> Chief Executive Officer, Solartron PCL
2004 -2007	>> Director, Sunwood Industry PCL
2002-2003	>> Chief Executive Officer, Digital Onpa International PCL
1994-2002	>> Executive Director, GMM Grammy PCL

## **Training Program**

2004 >> DAP27/2004 Thai Institute of Directors Association (IOD)

Number of Shares held >> 4,580,000 shares

Mrs.Rawittha Pongnuchit **Independent Director Chairman of Audit Committee** 



## **Academic Background**

Master Degree Master of Political Science, Thammasat University Bachelor of Law, Ramkhamhaeng University Bachelor Degree

## **Work Experience**

Present >>Independent Director, Chairman of Audit Committee, Solartron PCL

**Past Position** >>Inspector General, Ministry of Finance

>>Director of Bureau of Tax Appeal, Revenue Department

>>Legal official 9, Specialized in Combating the Erosion of Tax Systems,

Bureau of Central Audit Operations, Revenue Department

>>Director office of the Secretary, Revenue Department

**Training Program** 

>>The Joint State-private Sector Regular Course, National Defense

College, Class 15

>>Director Certification Program (DCP 59), Thai Institute of Directors

Association (IOD)

>>Public Law and Management Course, Institute of King

Prajadhipok, Class 3

**Number of Shares held** >> -0-

Mr.Suchat Trisirivattwat **Independent Director** 



## **Academic Background**

Master Degree	Master of Science (Accounting), Thammasat University
Bachelor Degree	Bachelor of Business Administration (Accounting),
	Thammasat University

2004

Work Experience	
2004 – Present	<ul><li>&gt;&gt; Independent Director ,Audit Committee, Solartron PCL</li><li>&gt;&gt; Managing Director, Klangdong Lime and Expert Environment Co., Ltd.</li></ul>
2006 – Present	>> Managing Director, Indara Insurance PCL
2001 – 2009	>> Managing Director, Environmental Conservative Service Co.,Ltd.
2002-2005	>> Managing Director, Thai Charoen Assurance
Training Program	
2009	>> Advance Audit Committee Programs (1/2009)
2008	>> Role of the Compensation Committee Program (5/2008)
2008	>> Chartered Director Class (3/2008)
2006	>> DCP72/2006 Thai Institute of Directors Association (IOD)
2006	>> RCP13/2006Thai Institute of Directors Association (IOD)
2006	>> QFA4/2006 Thai Institute of Directors Association (IOD)
2004	>> DAP21/2004 Thai Institute of Directors Association (IOD)

>> ACP1/2004 Thai Institute of Directors Association (IOD)

#### **Number of Shares held** >> -0-

Dr.Pavan Siamchai Director Chief Operation Officer



## **Academic Background**

<u>Doctor</u> of Philosophy Ph.D in Electrical and Electronics Engineering,

Tokyo Institute of Technology, Japan

Master Degree Master of Engineering (Electrical), Chulalongkorn University

Bachelor Degree Bachelor of Engineering (Electrical) 2<sup>nd</sup> Honor, Chulalongkorn University

## **Work Experience**

2009 – Present >> Director, Risk Management Committee

Chief Operating Officer, Solartron PCL

2007 - 2009 >>Project Coordinator, Centrotherm photovoltaics AG

2005–2007 >> Chief Operating Officer, Solartron PCL 1996-2005 >> Researcher / Project Manager NECTECH

>> Researcher / Project Manager NASDA

>> Guest Lecturer Mahanakorn University of Tecnology

1996 - Present >> Guest Lecturer Asian Institute of Technology

Number of Shares held >> -0-

Ms.Romchalee Chanprasit Independent Director



## **Academic Background**

Master Degree Master of Science in Management, Boston University, London Campus

Bachelor Degree Bachelor in Business Administration, Institute of Business Studies, London

Certificate of Commerce Assumption Commercial College, Bangkok

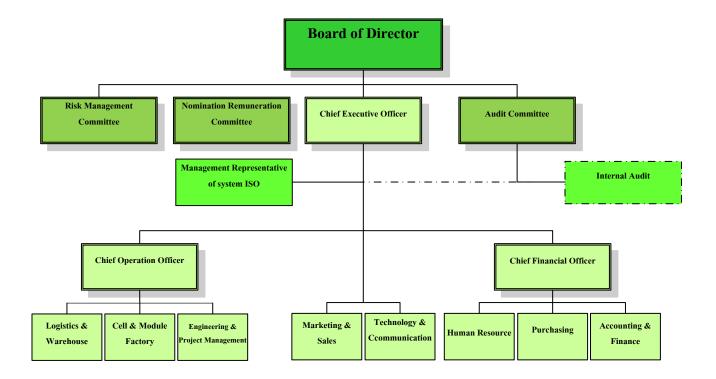
**Work Experience** 

2011 – Present >> Independent Director, Audit Committee, Solartron PCL
2011-Present >> Chairman of Attitude Technology Solutions Co., Ltd. (ATS)
2010-Present >> President of Beyond Boundary Noble International Ltd. (BBNI)
2007-Present (DGI)

2007-Present >> Director of Asia Phoenix Angels – Hong Kong (APA)

Number of Shares held >> -0-

## **Organization Chart**



## **General Information**

Company Name **Head Office**  **Solartron Public Company Limited** 

1000/65,66,67 PB. Tower 16th Floor Sukhumvit 71 Road, North Klongtan,

Wattana, Bangkok 10110 Tel. +66-2-392-0224-6

Fax. +66-2-381-2971, +66-2-381-0936

Registrar:

Thailand Securities Depository Co., Ltd 62 The Stock Exchange of Thailand Building Rachadapisek Road, Klongtoey, Bangkok 10110

Tel: +66-2-229 2800

Call Center: +66-2-229 2888

Solartron **Technology** Center

88/8 km 6, Thanarach Road, Tumbol Nongnumdang, Parkchong District,

Nakornratchasima 30130 Tel. +66-44-36-5651-3 Fax. +66-44-36-5354

Website E-mail

www.solartron.co.th

support@solartron.co.th

**Registered Capital** 719.453,723 Baht **Registered Ordinary Shares** 719,452,723 Shares **Par Value** 1 Baht **Registered Ordinary Share with** 449,659,723 Shares

paid

Registered Capital with paid 449,659,723 Baht

**Established Date** November 12, 1986

Type of Business Manufacturing, Survey, Design and Installation of solar power systems and Turnkey Solar Power Plant Project Management

Company Code 0107547000877

Auditor:

Mr. Anusorn Kiatgungwalgri The Certified Public Accountants

License No. 2109

Ms. Kwanjai Kiatgungwalgri The Certified Public Accountants

License No. 5875 **ASV & Associates Limited** 47 Soi 53, Rama 3 Road, Bangpongpang, Yannawa

Bangkok 10120 Tel.: +66-2-294-8504 Fax.: +66-2-294-2345

Lawyer:

Mr. Somkiat Ruengsurakiat Bangkok Law Office & Associates Co., Ltd.

17 Fl., Ocean Tower II Bldg., 75/20 Sukhumvit 21 Road, Klongtoey Nua, Wattana, Bangkok 10110

Tel.: +66-2-661-6896-9 Fax.: +66-2-661-6895

## Nature Business

## **History and Development**

Solartron Public Company Limited (The Company) was established in 1986. The Company has been providing Thailand with solar cell systems-source of clean energy for more than 27 years. The Company offers turnkey service including survey, design, sizing, installation, commissioning, monitoring, maintenance and after sale services. So far, the Company provided more than 250,000 solar application systems all over Thailand and neighboring countries. The Company has 80% market share of solar power project for government and local administration sectors. At present, the company is constructing an upstream solar cell factory, with the capacity of 65 Megawatt per year, in order to support a rapid growth of demand for solar power in Thailand and global market. As a result, the Company has been granted BOI privilege for corporate income tax exemption for eight years. Therefore the solar cell factory will make the company to achieve the cost – efficiency aim, and to modify mechanism of products to satisfy the customer's requirements.

### **Products and Services of Solartron**





## **High Efficiency Poly Crystalline Cells**

Dimension: 156 x 156 mm.

Thickness: Wafer 200+20 µm, Cell 250+30µm

Front: Silicon nitride anti-reflection Coating., 1.5 mm busbar

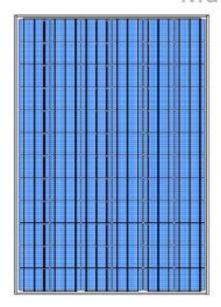
Back: Full surface aluminum., 3.0 mm busbar

## **Quality and Performance**

- All products passed in-line optical inspection
- 100% inspected for shunt resistance and reverse current.
- PID Free.
- Regularly monitor performance and solderibility
- Superior mechanical performance.
- Excellent Monitor product performance and soldering Properties.
- Optimized performance for AM1.0 and tropical region.
- All product conform to the regulation of RoHS.

Model	Eff* (%)	Pmpp(W)	Voc (V)	Isc(A)	Vmpp(V)	Impp(A)
164	16.5	3.99	0.617	8.50	0.508	7.92
166	16.6	4.04	0.620	8.54	0.510	7.97
168	16.8	4.09	0.623	8.60	0.513	8.02
170	17.0	4.14	0.626	8.65	0.517	8.08
172	17.2	4.19	0.628	8.68	0.519	8.10
174	17.4	4.23	0.630	8.72	0.522	8.13
176	17.6	4.28	0.630	8.75	0.525	8.16
178	17.8	4.33	0.634	8.77	0.527	8.19

# 270W/275W/280W/285W Multicrystalline Silicon Solar Module



Module Efficiency is up to 16%, minimizing installation costs and maximizing the output of the system.

1970x995x46mm is suitable for power plant system.

High Stability, High Reliability and Low Degradation.

### Warranty

5 years Material and Workmanship Warranty 10 years on 90% of the minimum power output 25 years on 80% of the minimum power output

### Standards and Certification

ISO 9001:2008, ISO 14001:2004, TIS 18001:1999 and OHSAS 18001:2007 certified factories CE Mark (EMC–Directive 2004/108/EC) certificate of European Conformity RoHS certified of directive on the restriction of the use of certain hazardous substances

TIS 1843-2553 Crystalline silicone terrestrial photovoltaic modules – design qualification and type approval, Thai Industrial Standards

### **Electrical Characteristics**

Characteristics	SP280E	SP285E	SP290E	SP295E	
Rated Power, Pm (W)	270	275	280	285	
Maximum Power Tolerance (%)	±5	±5	±5	±5	
Open Circuit Voltage, Voc (V)	44.28	44.57	44.71	44.86	
Short Circuit Current, Isc (A)	8.43	8.53	8.58	8.63	
Maximum Power Voltage, Vmp (V)	34.75	34.82	35.18	35.50	
Maximum Power Current, Imp (A)	7.77	7.90	7.96	8.03	
Module Efficiency (%)	13.78	14.03	14.28	14.54	
Maximum System Voltage (V)		100	0		
Maximum Rated Current Series (A)		15			
Temperature coefficients of Pmax	-0.43 % / °C				
Temperature coefficients of Voc	-0.31 % / °C				
Temperature coefficients of Isc	0.04 %/ °C				
Nominal operating cell temperature (NOCT)	47.3 °C				

Standard Test Conditions of Irradiance of 1,000 W/m2, Spectrum 1.5 AM, Module Temperature 25 °C.























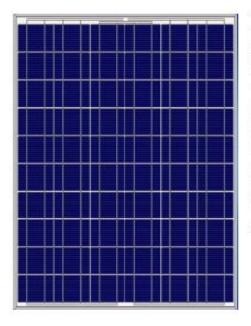








## Multi-Crystalline Silicon Solar Modules 230 Watt SP230



The solar modules SP230 series by Solartron are superior quality and high performance solar modules designed for use in a wide variety of applications. The innovatively-designed modules are manufactured from automated production lines under consistently high production quality conditions.

The highly efficient mono-crystalline silicon solar cells are encapsulated in a thick tempered glass cover, transparent EVA (ethylene vinyl acetate) sheets and high quality back sheet to provide efficient protection from the severest of environmental conditions. The entired laminate is installed in anodized aluminum frames to provide structural strength and ease of installation. The solar modules are also equipped with a junction box which is IP65 protection rated making electrical connections in the field more convenient. Bypass diodes are also included to minimize the power drop caused by shade.

Standards and Certificates: ISO 9001:2008 ISO 14001:2004 TIS 18001:1999, OHSAS 18001:2007 IEC 61215 TIS, 1843-2542 TLS 8001-2003 CE Mark (EMC-Directive 2004/108/EC) RoHS

	Model	SP230	
Performance Under Standard Te	st Conditions (STC)*		
Maximum Power (Wp)	W	230	
Tolerance of Maximum Power	%	+5/-5	
Maximum Power Voltage (Vmp)	V	29.80	
Maximum Power Current (Imp)	Α	7.71	
Open Circuit Voltage (Voc)	V	36.80	
Short Circuit Current (lsc)	Α	8.34	
System Design Characteristics			
Maximum System Voltage	V	1,000	
Limiting Reversing Current	A	12	
Main Materials			
Cells per Module	piece	60	
Cell Dimensions	cm	15.6x15.6	
Front Glass Thickness	cm	0.4	
Encapsulant		EVA	
Back Sheet		PVF/PET/PVF	
Junction Box		IP65	
Bypass Diodes	piece	3	
Connector Type	•	MC 4	



























## 210W/215W/220W/225W Multicrystalline Silicon Solar Module

Module Efficiency is up to 15%, minimizing installation costs and maximizing the output of the system. 1520x995x46mm is suitable for residential and commercial on-grid system. High Stability, High Reliability and Low Degradation

### Warranty

5 years Material and Workmanship Warranty 10 years on 90% of the minimum power output 25 years on 80% of the minimum power output

### Standards and Certification

ISO 9001:2008, ISO 14001:2004, TIS 18001:1999 and OHSAS 18001:2007 certified factories
CE Mark (EMC-Directive 2004/108/EC) certificate of European Conformity RoHS certified of directive on the restriction of the use of certain hazardous substances

TIS 1843-2553 Crystalline silicon terrestrial photovoltaic modules - design qualification and type approval, Thai Industrial Standards

### **Electrical Characteristics**

Characteristics	SP210E	SP215E	SP220E	SP225E	
Rated Power, Pm (W)	210	215	220	225	
Maximum Power Tolerance (W.)	±3	±3	±3	±3	
Open Circuit Voltage, Voc (V.)	33.26	33.59	33.69	33.80	
Short Circuit Current, Isc (A.)	8.52	8.69	8.73	8.77	
Maximum Power Voltage, Vmp (V.)	26.32	26.51	26.86	27.31	
Maximum Power Current, Imp (A.)	7.98	8.11	8.19	8.24	
Module Efficiency (%)	13.89	14.22	14.55	14.90	
Maximum System Voltage (V.)		10	00		
Maximum Rated Current Series (A.)		1	5		
Temperature coefficients of Pmax	-0.43 % / °C				
Temperature coefficients of Voc	-0.31 % / °C				
Temperature coefficients of Isc	0.04 %/ °C				
Nominal operating cell temperature (NOCT)	47.3 °C				

Standard Test Conditions of Irradiance of 1,000 W/m2, Spectrum 1.5 AM, Module Temperature 25 °C.































## 140W/145W/150W Multicrystalline Silicon Solar Module

Module Efficiency is up to 15%, minimizing installation costs and maximizing the output of the system. 1505x677x46mm is suitable for residential and commercial on-grid system. High Stability High Reliability and Low Degradation

### Warranty

2 years Material and Workmanship Warranty 10 years on 90% of the minimum power output 25 years on 80% of the minimum power output

### Standards and Certification

ISO 9001:2008, ISO 14001:2004, TIS 18001:1999 and OHSAS 18001:2007 certified factories

CE Mark (EMC-Directive 2004/108/EC) certificate of European Conformity RoHS certified of directive on the restriction of the use of certain hazardous substances

TIS 1843-2553 Crystalline silicon terrestrial photovoltaic modules - design qualification and type approval, Thai Industrial Standards

### **Electrical Characteristics**

Characteristics	SP140E	SP145E	SP150E	
Rated Power, Pm (W)	140	145	150	
Maximum Power Tolerance (W.)	±3	±3	±3	
Open Circuit Voltage, Voc (V.)	22.10	22.25	22.46	
Short Circuit Current, Isc (A.)	8.46	8.62	8.73	
Maximum Power Voltage, Vmp (V.)	17.84	17.88	18.21	
Maximum Power Current, Imp (A.)	7.85	8.11	8.24	
Module Efficiency (%)	13.74	14.23	14.72	
Maximum System Voltage (V.)		1000		
Maximum Rated Current Series (A.)		12		
Temperature coefficients of Pmax	-0.43 % / °C			
Temperature coefficients of Voc	-0.31 % / °C			
Temperature coefficients of Isc	0.04 %/ °C			
Nominal operating cell temperature (NOCT)	47.3 °C			

Standard Test Conditions of Irradiance of 1,000 W/m2, Spectrum 1.5 AM, Module Temperature 25 °C.































## **Solar Power Plant**

## 1. Land Grabbing Filling Leveling And Testing









## 2. Drainage System





## 3. Underground Caballing





## 4. PV Module Support Structure



## 5. Control & Facility building



## 6. PV Module Installation



## 7. Low & High Volt DC Wiring



## 8. Inverter Installation



## 9 Step up Transformer Installation



## 10 High Volt Grid System Installation



## 9. Power Sub Station



## 10. Facility & Infrastructure



## Revenue

The company revenue structure for the periods 2010 and 2011 and 2012 by the type of products and services are as follows:

**Table 1** Revenue structure for the periods 2010 and 2011 and 2012

	2010		2010 2011		2012	
	Value ( '000 Baht)	%	Value ( '000 Baht)	%	Value ( '000 Baht)	%
Revenue from selling Solar System     and Construction of Solar Power     Plant*	226,180	101.58	1,242,623	97.98	1,101,993	93.31
Revenue from selling Solar Modules     BOS	(5,465)	(2.45)	24,077	1.90	51,942	4.40
3. Other Revenue**	1.938	0.87	1,539	0.12	27,068	2.29
Total Revenue	222,653	100.00	1,268,239	100.00	1,181,003	100.00

### Remark:

- \* Including solar cell installation services along with solar modules and balance of system.
- \*\* The significant other revenues consist of the revenue from interest, the profit from the foreign exchange and claim revenue from insurance company.

## **Risk Factor**

## Solartron Risk Management Policy

The Company has realizes the significance of risk management and good corporate governance. The significance Risk Factors are explained as follows:

## 1. The Risk from the Entrance of New Competitors

Nowadays, the government has fully supported the usage of solar energy. The marketing opportunity attracts both local and foreign companies to invest in the business. These newcomers may seize the company's market share and will affect the company growth in the future. The expected newcomers can be divided into 2 categories as follow:

- i. Competitors who assemble the solar modules: These competitors, both local and foreign, are expected to be entering into the business due to the rapid expansion of the market. Especially, the companies that already have the solar module related business in foreign countries. These companies will have knowledge in technology and in acquiring raw materials. However, the company has relatively high competitive advantage due to the expertise in installing the system in remote area. The company is one of four companies that had the solar module factory in Thailand. Also, it is in a good relationship with suppliers and customers. Moreover, the promotion for solar module assembly line from the BOI has already been annulled. Therefore the newcomers in this business will not anymore have tax privileges.
- ii. The competitors who are to produce solar cells: The barrier of entry for this business is higher due to longterm, investment in raw material and selection of the state of the art of technology. Going upstream with low cost raw material in the market clearly is an important advantage over other competitors.

## 2. The Risk of the Volatility of the Exchange Rate

The company imports most of its raw materials including solar cells. Its payment is mainly in US dollar and Euro, while most of the products are sold in Thai Baht. If the rate of US dollar or Euro rises comparing to Thai currency, the company cost will increase accordingly.

The company opens letter of credit (L/C) monthly with fully coverage forward contract to protect its exchange rate risk when it expects the vulnerable of the currency.

## 3. The Risk of the Reliability on Government Sectors

During the past 25 years, approximately 70% of the company's revenue came from the installation project of the solar systems for the central and local government sectors. Therefore, if the government policy change, the projects related to the promotion of Government Policy will be impacted it may cause a significant drop in future revenue.

However, the government classified the renewable energy as the Energy Security in the National Energy Strategy to promote the usage of renewable energy. Initially, the government will be the key organization to stimulate the solar energy market. This strategy has succeeded in the developed countries such as Germany and Japan.

The Company occupied more than of 70% of the total government projects, which implies that it has a capability in bidding and delivers the good quality of project. The company has confidence in doing solar business in Thailand that conform the National Energy Strategy. Therefore, Private sector and International Solar Investor trust and wants to do Solar business with the company.

## **Share Holder Structure and Dividend Policy**

As at December 28, 2012, the list and percentage of the first 10 major shareholders is as follows:

1	TAECHANARONG GROUP1	53,200,500
2	Mr. GILBERT N WONG	21,500,000
3	ROJMETA GROUP <sup>2</sup>	19,580,000
4	Mr. Pichit Shinwittayakul	10,500,000
5	Ms. Sophit Phusanakhom	9,000,000
6	Mrs. Thaweesak Sriprajitchai	8,500,000
7	Mrs. Pornphan Theptrakarnporn	7,000,000
8	CLEARSTREAM NOMINEES LTD.	6,486,860
9	Mrs. Nattapong Rungsan	4,799,000
10	Mr. Nattapon Songsaychonchai	4,235,000

## Remark:

<sup>&</sup>lt;sup>1</sup>Taechanarong Group Shareholders follows:

ชื่อ	จำนวนหุ้น	ร้อยละ	
1. Ms.Phipannee Taechanarong	28,390,000	6.31	
2. Ms. Phupha Taechanarong	13,617,100	3.03	
3. Ms.Phatamon Taechanarong	8,733,400	1.94	
4. Mr.Songkran Taechanarong	2,460,000	0.55	

<sup>&</sup>lt;sup>2</sup> Rojmeta Group Shareholders follows:

ชื่อ		จำนวนหุ้น	ร้อยละ	
1. Ms.Pornsiri	Rojmeta	15,000,000	3.34	
2. Mr.Akaradej	Rojmeta	4,580,000	1.02	

## **Dividend Policy**

The maximum company dividend policy is approximately 40 % of its Net Profit after deduction of legal reserves.

## **Management Structure**

Management structure of company consists of 2 Committees, The Board of Director and Audit Committee. Each Committee has duties and responsibilities as follows:

## (1) Board of Directors

As of December 31, 2011, the Board comprised of 7 members s as follows:

Name	BD	AC	Position
Mr. Cherdpong Sirivit	✓		Chairman of the Board of Director
Ms.Patama Wongtoythong	✓		Deputy Chairman of the Board of Director/ Company Secretary
Mr.Akaradej Rojmeta	✓		Director
Ms. Rawittha Pongnuchit	✓	✓	Independent Director / Audit Committee
Mr. Suchat Trisirivattwat	✓	✓	Independent Director / Audit Committee
Ms.Romchalee Chanprasit*	✓	<b>✓</b>	Independent Director / Audit Committee
Dr. Pavan Siamchai	<b>√</b>		Director

## Scope of duties and responsibilities of the Board of Directors

- 1. To undertake the duties in accordance with laws, objectives and requirements of the company and resolutions of the shareholders with due care and integrity and to look after the interest of the company.
- 2. To set the business policies and direct the operations of the company and supervise the management to ensure effectiveness and compliance with the prescribed policies and to maximize the economic value of the business and to provide maximum business stability to shareholders.
- 3. To arrange a reliable accounting system, financial reports and auditing and to set up internal control procedures and suitable internal audit system with consistent follow-up.
- 4. To approve the quarterly and financial reports and auditing and the annual investment budget and to monitor the operating results of the company, including the major progress in various aspects and provide advice/suggestions and make a decision with due care on the agenda proposed in the meeting of the board of directors.
  - 5. To appoint/remove the subcommittee on specific matters as deemed suitable.
- 6. An independent director is ready to provide his independent judgment on the issues and to oppose any act of other directors or the management if there is any conflict significant to the company and the shareholders.
- 7. To arrange a policy on business supervision, business ethics and employee ethics as a guideline on business conducts and to arrange and supervise the administrative work in accordance with the good governance principles consistently.
- 8. To approve the key transactions of the company such as acquisition or disposal of assets, expansion of the investment projects, determination of the authority to be assigned and any action required by laws and to look after the conflict of interest among stakeholders of the company.
- 9. To approve and/or grant consent on the inter-company transactions between the company and its subsidiaries in accordance with related notifications, requirements and guidelines of the Stock Exchange of Thailand.
- 10. To suspend sale or purchase of shares of the company one month before public disclosure of the financial reports.
- 11. To report any shareholding by himself/herself and his/her spouse and children in the meeting of the board of directors every quarter and to immediately inform the company if there is any purchase or sale of sharer (securities) of the company.
  - 12. To arrange a self assessment of the director annually.

## (2) Audit Committee

Audit Committee comprises of 3 members for 2-year term service as follows:

1. Mrs.Rawittha Pongnuchit Chairman of Audit Committee

2. Mr.Suchat Trisirivattwat Audit Committee

3. Ms.Romchalee Chanprasit Audit Committee (Effective on September 23, 2011)

## Scope of duties and responsibilities of the audit committee

The scope of duties of the Audit Committee has been made in accordance with the notifications issued by the Stock Exchange of Thailand:

- 1. To verify in assuring that the Company's financial report is correct and actuated and sufficiently disclosed.
- 2. To verify in assuring that the Company shall have the appropriated effective internal control and internal audit systems on cooperation with the internal auditor and internal controller and to consider the independence of the internal audit agency as well as to provide the approval for the appointment, transfer, termination of the chief of the internal audit agency or any other agencies responsible for the internal audit.
- 3. To verify in assuring that the Company has acted in compliance with the law on Securities and Exchange, requirements of the Stock Exchange and the laws relating to the Company's business.
- 4. To consider, select, propose to appoint the independent person or persons to perform the duty as the Company's auditor and to propose the remuneration for such person/persons, considering the reliability, resources adequacy, workloads and personnel's experiences as well as participating in the meeting with the auditor without the involvement of the Management for at least once year.
- 5. To consider the related items or the items that would have the conflict to interest to meet the requirement of law or the provision of the Stock exchange to assure that such items are reasonable and resulted in the maximum benefit to the Company.
- 6. To prepare the report of the Audit Committee's activities, consisting of the opinions about the preparation process and the disclosure of the Company's accurate, complete and reliable financial report, including the options relating to the adequacy of the Company's internal control system by disclosing it in Company's annual report.

Such report must be signed by the Chairman of the Audit Committee and must consist of at least the following information:

- 6.1 The opinions about the accuracy, completion and reliability of the Company's financial report.
- 6.2 The opinions about the adequacy of the Company's internal control system.
- 6.3 The opinions about the act in compliance with law on Securities and Stock Exchange, provisions of Stock Exchange or the laws relating to the Company's business.
  - 6.4 The opinions about the appropriateness of the auditor.
  - 6.5 The opinions about the items that may post the conflict of interest.
  - 6.6 The number or the meeting of the Audit Committee and each member's meeting participation.
- 6.7 The overall opinions or the observations obtained by the Audit Committee from the operation as required in the charter.
- 6.8 Other items as deemed to be known by shareholders and general investors under the scope and responsibility assigned to them by the Company's Board of Directors.
- 7. Any other operations as assigned by the Company's Board of Directors with the approval of the Audit Committee who directly responsible for the Company's Board of Directors who shall remain to be responsible for the Company's operation against the third party.
- 8. To verify and amend the Audit Committee charter to be up to date and to suit with the Company's conditions and circumstances.

## **Independent Director Selection Criteria**

- 1. Not holding shares exceeding 1% of the total shares with voting rights of the Company, its parent Company, its associated company, or any potential conflicting person, which shall be inclusive of the shares held by those related persons;
- 2. Not being nor having been a director participating in the management, employee, officer, consultant who receiving regular salary, or controlling person over the Company, or potential conflicting person, excepting that he/she has no such characteristic for at least two years before the date of filling of the application with the Officer;
- 3. No being a person related by blood or by registration under laws as father, mother, spouse, sibling and child, including spouse of child of executive, ,major shareholder, controlling person of the Company or its subsidiary company;
- 4. Not having nor having had any business relationship with the Company, its parent company, its associated company, or potential conflicting person as might interfere with his/her use of independent discretion, including not being nor having been a major shareholder, a dependent direction, including not being nor having been a major shareholder, a dependent director, or an executive of a person who has a business relationship with the Company, its parent company, its subsidiary company, its associated company or potential conflicting person except that he/she has no such characteristic for at least two years before the date of filling of the application with the office.

The business relationship mentioned in the above paragraph includes any trading transaction in the ordinary course of business, granting and taking a lease of real property, any transaction relating to assets or services, the grant or acceptance of financial assistance by way of loan, guarantee or deposit of assets as security for the performance of obligations and other similar transactions to the effect that an applicant or a party must pay a debt to the party in an amount equal to 3% or more of its net tangible assets or Bath 20 million or more, whichever is lower. The calculation of connected transaction value as prescribed by Notification of the Board of Governors of the Stock Exchange of Thailand Re: Disclosure of Information and Other Acts of Listed Companies Concerning the Connected Transactions apply mutatis mutandis to the method used to calculate the amount of such indebtedness. In this connection, any indebtedness incurred during one year before the date on which the business relationship with the same person arose must be included;

- 5. Not being nor having been an auditor of the Company, its parent company, its subsidiary company, its associated company, or potential conflicting person, and not being a major shareholder, a dependent director, an executive, or partner of the auditing firm employing an auditor of the Company, its parent company, its subsidiary company, its associated company, or potential conflicting person except that he/she has no characteristic for at least two years before the date of filling of the application with the Office;
- 6. Not being nor having been any professional services provides including a legal advisor and a financial advisor, obtaining service fees of more than Baht 2 million per annum from the Company, its parent company, its subsidiary company, its associated company, or potential conflicting person. If a professional adviser is a legal entity, this will include a major shareholder, a dependent director, an executive, or a partner of such professional services provider except he/she has no such characteristic for at least two years before the date of filling of the application with the Office;
- 7. Not being a director appointed to represent any director of the Company, a major shareholder, or a shareholder who is a related person of the Company's major shareholder;
- 8. Not having any other characteristics which make it incapable of expressing an independent opinion with regard to the Company's operation.

## Remuneration for the Board of Directors

In the company annual general shareholder meeting year of 2012 of April 27, 2012, the compensation for the committee members was set as follows:

	Monthly payment / person	Meeting allowance /time/person
The Board of Directors	10,000 THB	15,000 THB
Audit Committee	3,000 THB	10,000 THB
Nomination and Remuneration Committee	-	8,000 THB
Risk Management Committee	-	8,000 THB

Remark: The Chairman of every committee will get the compensation 20% more than the committee members.

## **Monetary Remuneration**

The total remuneration was paid as follows:

	2011	2012
Total remuneration (Baht)	1,781,800 THB	1,862,000THB
Number of Committee Member (Persons)	7	7
Type of remuneration	Meeting allowance and monthly payment	Meeting allowance and monthly payment

## Others Remuneration

The Company has the provident fund for the employees that began August 20, 2004 wherein employees pay 2% of their salary and the company will match an additional 2% each month into the provident fund.

# The number of Board of Director Meeting and Audit Committee Meeting and the Attendance by Individual Member of Fiscal Year 2011 and 2012

Name	Board of Directors Meeting		Audit Committee Meeting		Annual General Meeting	
	2011	2012	2010	2012	2011	2012
Mr.Cherdpong Siriwit	5/9	5/6	-	-	1/1	1/1
Ms.Patama Wongtoythong	9/9	6/6	-	-	1/1	1/1
Mr.Akaradej Rojmeta	9/9	6/6	-	-	1/1	1/1
Mrs.Rawittha Pongnuchit	6/9	4/6	4/4	4/4	1/1	1/1
Mr.Suchat Trisirivattwat	7/9	6/6	4/4	4/4	1/1	1/1
Ms.Romchalee Chanprasit	1/9	6/6	-	4/4	-	1/1
Dr. Pavan Siamchai	8/9	6/6	-	-	1/1	1/1

## **Inside Information Control**

Details are provides in Corporate Governance Section in a subject of "Equitable Treatment of Shareholders".

## Solartron and Cooperate Social Responsibility

The Company is confident that the development of sustainable organization not only involves the return on investment and suitable growth for shareholders, but corporate social responsibilities are also the identified as important to achieving the success.

The Company is mindful of replaying the benefit to the community and continuously conducts activities that bring prosperity to the society, such as clean energy park projects that service not only government sector but also community and students to have clean energy awareness.

## **Environmental Project**

# Energy saving measurement project

## Garbage banking Project

# Community social responsibility project

## **Education improvement**

## **Activities**

- Switch off; Light and Air conditioner during lunch break time
- Switch Air conditioner before and after working time
- Launch project garbage separation by type at Head Office and Factory, the monetary from selling glasses, plastic bottles will conglomerate to neighbor social development fund

### **Activities**

- Launch Children's day activity and Scholarship provided to Baan Pong Kra Sun School
- Sports day at Prasitwittayakarn (Baan Nar) School
- Enroll Buddhist ceremony year 2012
- Join "Gift Giving" to SPG funding for Children



## **Corporate Governance**

The Board of Directors has always realized the importance of conducting business in compliance with good corporate governance principles. The Board resolved corporate governance policy in written to comply with the principles of corporate governance stated by the Stock Exchange of Thailand (SET) as well as rules and regulations of the Securities Commission (SEC) which cover the following categories:

- Right of shareholders
- Equitable treatment of shareholders
- Role of stakeholders
- Disclosure and Transparency
- Responsibilities of the Board

## 1. Rights of Shareholders

Solartron realizes the basic rights of shareholder which include: 1) the right to buy, sell or transfer shares; 2) the right to gain share in Solartron's profit; 3) the right to receive relevant and adequate information of Solartron in a timely manner 4) the right to participate and vote in the shareholder meetings to elect or remove member of the Board, appoint the external auditor, and make decision on any transactions that may have any impacts on Solartron (i.e. amendments to Solartron's article of association of association or affidavit, capital increases or decreases). In addition, shareholders should be fully informed of the criteria and procedures in each agenda in an appropriate time prior to the meeting. Solartron shall avoid any actions that violate those rights of shareholders.

In the year 2012, Solartron held the 2012 Annual General Meeting (AGM) of shareholders on April 27, 2012. All 7 directors,3 nominated director and managements in significant positions attended the meeting, Thailand Securities Depository Co., Ltd (TSD) as SOLAR's share registrar submitted and invitation letter, annual report and other related information to the shareholders seven days prior to the meeting, although no there were no special agendas required to be reviewed prior to the meeting. In the invitation letter, Solartron completely informed shareholders of the criteria, procedures and documents needed for registration and Solartron's article of association related to the meeting agenda was attach to the letter. The invitation letter, the annual report and other related documents were also posted in Solartron's website in advance. Shareholders failing to attend the meeting were allowed to appoint one of those there independent directors as their proxies. Before the meeting, the Chairman informed shareholders about voting procedure and during the meeting the Chairman facilitated shareholders' questions and asked the responsible persons to answer all questions. The meeting took approximately two hours which was enough for clarifying issues, discussing, as well as answering questions and finding resolution. Solartron submitted the minutes of the shareholders' meeting with voting record and every question raised by the shareholders to the SET within fourteen days from the meeting date and posted such minute in Solartron's website for the shareholders' review without waiting for next meeting date.

## 2. Equitable Treatment of Shareholders

Solartron realizes that all shareholders should be treated in an equal way and fair treatment. This includes 1) supervising the uses of shareholders' money in proper ways; 2) ensuring that all processes and procedures of shareholders meeting allow equitable treatment of all shareholders, 3) allowing any shareholders who are unable to attend the meeting to appoint their proxies; 4) setting up procedures to prevent the use of inside information for abusive self-dealing, and 5) defining guidelines for directors and management interest reporting and connected transaction to be in compliance with the rules and regulations of the SET and the SEC.

In 2012 AGM of shareholders on April 27, 2012, Solartron proposed three independent directors so that the shareholders could choose as their proxies in case they were unable to attend the meeting. The shareholders could select one form which matched with their needs. Among these proxy forms, there was the form in which shareholders were able to specify their votes. The Chairman conducted the meeting by following the sequence of agenda defined in an invitation letter and did not add any new agenda. During the meeting, the Chairman facilitated shareholders' questions and asked the responsible persons to answer all questions regardless of the amount of shares they were holding. Solartron used voting cards for transparency and future reference and the Chairman announced voting result and scores entitled to ask for re-checking the scores immediately. Moreover

Solartron had policies and procedures to protect of insider information or abusive self-dealing. Those policies and procedures were conveyed to all staff both in verbal and written forms.

### 3. Role of stakeholders

Solartron realizes all stakeholders should be treated fairly in accordance with their legal right as specified in relevant laws. Solartron shall not take any action to violate the rights of such stakeholders. It was clearly stated in the corporate governance policy that the Board shall govern Solartron's operation to be in compliance with the SET's and SEC's guideline of treatment to stakeholders in business ethics regarding corporate social responsibility, standard practices to customer ,fair treatment to suppliers, human right and equitable working opportunity etc. In addition, SOLARTRON had a procedure to report significant information in which the stakeholders should be informed of in the annual report and Solartron's website. Such information includes quarterly financial statement, yearend financial statement, other published information, internal control and etc. Moreover, SOLARTRON also provided channel to receive suggestions, comments or complaints to the Compliance and Internal Audit Departments which report directly to the Board and the Audit Committee. If the stakeholders would like to make some inquires, they could contact investor relations as per details provided in Solartron's website.

## 4. Disclosure and Transparency

Solartron realizes that all Company's important information including financial data and non-financial data must be accurately disclosed on a timely basis. The information should be transparently disclosed through easy-to-access channels that are fairly accessible.

In the past fiscal year, SOLARTRON disclosed the quarterly financial statements, the year-end financial statement, the annual report, 56-1 the report, the minutes of shareholders' meeting, the resolution of the Board's meeting in significant agenda and other information. All this information was accurately disclosed on a timely basis in both Thai and English in Solartron's website (<a href="www.Solartron.co.th">www.Solartron.co.th</a>). SOLARTRON also has investor relation function to update disclosed all information required by SET and the SEC completely in annual report and 56-1 report which included roles a responsibilities of the Board and committee, number of board meeting and committee meetings, number of attendance by each member in the past year, directors' remuneration, statement of board responsibilities concerning Solartron's financial report presented along with the auditor report.

## 5. Responsibilities of the Board

The Board realized that the Board members play an important role in corporate government for the best interest of CNS and they are accountable to shareholder and independent of management.

### **5.1 Board Structure**

The Board of Directors comprises 7 members as follows:-

Executive Directors
 Non-Executive Director
 Independent Directors
 Person
 Persons
 Persons

Solartron has three independent directors. Solartron's definitions of independent directors was also considered to be in compliance with the SET's and SEC's rules and regulation stated in the section of "Independent Director" Although the Chairman of the Board of Director is not an independent director, the Chairman strictly adheres to Solartron's good corporate governance policy and perform in a transparent and prudent manner for the best interest of Solartron, Solartron's shareholders and all stakeholders.

Regarding the term of service of directors, Solartron's Articles of Association requires one-third of the directors to retire by rotation in every Annual General Meeting of Shareholders. If the number of directors can not be a multiple of three, the nearest number to one-third must retire from Solartron's and the directors who have the longest term of service must retire by rotation.

For efficiency, The Board of Directors would carefully review the effectiveness of the directors with the multiple board membership or the number of board positions that a director can hold. Solartron disclosed the

information about board membership position of individual director s to shareholder in form 56-1 report and Solartron's annual report.

Solartron provide a person in chance of the company secretary function to serve the Board of Directors in areas of providing legal advice taking care of the Board's and monitoring compliance to the Board's resolutions.

The details about the list, role, duties and responsibilities of the Board of Director and company secretary are all clearly stated in the section on "Management Structure".

### 5.2 Committees

Solartron's has clearly separated the duties and responsibilities of key management to create transparency. The role, duties and responsibilities of the Board of Director, the Audit Committee, the Risk management Committee and the Nomination and Remuneration Committee are all clearly defined in section "Management Structure"

### 5.3 Role and Responsibilities of the Board

The Board of Directors review and approves key business matter such as the vision and mission of Solartron's strategies, financial targets, risk, major business and budget plans. The Board of the Directors also monitors management's performance to the efficiency. The Board of Director conveys Solartron's vision, mission, strategy and target to the director, executive and staff throughout the organization via various communication channels including annual staff meeting intranet system and e-mail system.

The Board realizes the important of conducting its business in compliance with good corporate governance principles. The Board understands that good corporate governance is critical factor in achieving success. Therefore, the Board has institute good corporate governance principles through procedure to transact business in a transparent manner. In the year 2005, the Board also resolved to announce the corporate governance policy in written. This policy was a guideline that shall ultimately maximize shareholders' interest while taking to consideration the interest of all stakeholders.

The Board of Directors has formulated a Code of Business Conduct for directors, management and employees to ensure that they are aware of Solartron's expectations regarding the

standard practices towards shareholders, customers, suppliers, competitors, colleagues and society. The Code of Business Conduct was Prepared and distributed to all of staff in order to disseminate clear information about Solartron's standard practices on such matter. Solartron also promoted its Code of Business Conduct to all staff and set up a monitoring system to make sure they seriously follow the rules.

The Board has policies and guideline to prevent related persons from exploiting their positions for personal interest. Any connected transactions must be necessary for Solartron's benefit and comply with the SET's and SEC's rules and regulations.

The Board realizes the importance of good internal in areas of operating control and operating procedures, including financial reporting. All policies about internal control are designed to comply with the rules and regulations of authorities. As such, it's stated in Solartron's policy that all departments must operate with good internal control and as comply fully with the rules and regulation of the authorities. The compliance and internal Audit Department are responsible for reviewing and monitoring Solartron's operation in this respect. The function of the Compliance and Internal Audit Departments is to evaluate the risk of internal control within Solartron's in order to contribute to the proper. Efficient and effective use of resources. Those in Compliance and Internal Audit Departments should perform their jobs independently and report to the Audit Committee and the Board of Directors on a regular basis.

## **5.4 Board Meetings**

Solartron's Board of Directors holds regular meetings on monthly basis, or at least, or at least on a quarterly basis, and may hold extra meetings when necessary. The Chairman of the Board of Director and the executive directors jointly set the agenda for the Board of Directors' meeting, considering the degree of importance and necessity of agenda. However, each director can propose an issue for a meeting agenda. The company secretary will send invitation letter attached by the meeting agenda and provide adequate document to the Board of Directors that the directors have enough time to review the information prior to the meeting. The Board of Director sets the schedule, time, venue of the Board of Director' meeting in advance so that all directors can attend the meetings.

In the Board of Directors' meeting, the Chairman of the Board of Directors appropriately allocates the meeting time to propose the meeting agenda and complete director discussions. The Chairman of the Board of Director also encourages creative and careful consideration in the meeting. To ultimately maximize shareholders' interest, each director pay attention to each issue presented in the meeting, including issue concerning governance of Solartron's For the meeting agenda that may relate to each function within Solartron's the Board of Directors can invite any involved executives or managements to attend the Board meeting so that they can present details on the issues that they are directly responsible for. The Board of Director will have a chance to know more about the executives and be able to prepare a succession plans.

In the fiscal year 2012, the Board of Director held 6 meetings. The number of Board of meetings attended by each director is clearly disclosed in the section of "The number of Board of Director Meeting and Audit Committee Meeting and the Attendance by Individual Member of Fiscal Year 2012".

#### 5.5 Nomination and Remuneration Committee

Nomination and Remuneration Committee considers, selects and recommends to the company board and proposes the approval from the shareholders to appoint company director. Company executives will be selected by top level executive group and report to the Nomination and Remuneration Committee. The details of remuneration is stated in the section of "Remuneration Paid to the Management".

#### 5.6 Board and management Training

The Board of Directors encourages and facilitates training and development for directors, managements, company secretary. Solartron's mostly joins the program and seminar held by the SET, the SEC and Thai Institute of Director Association.

For the past fiscal year, Solartron supported and sent directors, managements, company secretary, all staff to attend various training courses regarding the new rules and a principle of good corporate governance, in order to the continuously improve their skills and performance.

#### **Transactions with Related Parties**

#### Connected Transaction with Parties with Possible Conflict of Interest

During the year 2012, the Company entered into the connected transactions with the parties or persons who might have conflict of interest to the Company. Most of the transactions were related to sales and purchased of spare parts and services. The said transactions were engaged in accordance with the conditions mutually agreed between the Company and the related parties, which relied on the normal business conditions. The Company already disclosed information on such connected transactions, such as description of transactions, transactions value, and pricing policy in note 31 in the financial statements.

#### **Necessity and Reasonableness**

Most of the connected transactions are the transactions undertaken to support previous project of business of the Company. To enter into each previous, the Company always makes a decision based on the utmost good faith for the Company's benefits without any conflict of interests.

#### **Procedures for Connected Transaction**

The Company has clearly stated the procedures for connected transaction in an authorized manual of the Company which aligns with the regulations of the Stock Exchange of Thailand.

#### Policy and Possibility in conducting the Connected Transaction in Future

The Company has to enter into the connected transactions, but such transactions shall be conducted based on the normal business conditions by not transferring any benefits to the parties who might have the conflict of interest with the Company. The Company shall assign the Audit Committee or the external auditor or independent specialists to consider an appropriate value, and disclose type of transaction, value, and rational in conducting the transactions to the shareholders as required by the notifications of the Securities and Exchange Commission and the Stock Exchange of Thailand.

# Transaction with Related parties

Connected transactions between Solartron PCL and Mrs.Patama Wongtoythong

1. Connected transactions between Solartron PCL. and Facrent Co., Ltd.

Relationship	Description	Size of activities (Baht)		The necessary and reasonable of activities and policy to set the
		2011	2012	price
Spouse of Mrs.Patama Wongtoythong	Warehouse rental	556,920	556,920	The location of warehouse is near the Bangkok office and the rental rate is lower than market rate.

The above connected transactions are reasonable, equitable and in line with an ordinary and usual course of the Company's business and / or supporting an ordinary and usual course of the Company's business and / or supporting an ordinary and usual course of the Company's business.

# Management Discussion and Analysis of the Financial Position and Results of Operations

Operation Results	2012
Revenue from sales and service	1,153.94
Gross Profit (Loss)	243.11
Financial Status	
Current Asset	1,660.58
Non-Current Assets	746.50
Total Asset	2,407.09
Current Liabilities	1,160.37
Non-Current Liabilities	12.95
Total Liabilities	1,173.32
Registered Share Capital	719.45
Premium on share capital	449.66
Retained Earnings	
- Appropriated legal reserve	39.68
- un-appropriated	171.83
Surplus on revaluation of fixed assets	31.67
Total Shareholder Equity	1,233.77

# **Financial Ratio**

Financial Ratio	2012	2011	2010
Current Ratio	1.43	1.65	1.10
Quick Ratio	1.19	1.18	0.36
Profit from operation ratio	15.69	2.90	(16.83)
Net profit ratio	14.85	2.31	(18.22)
Return on Assets	8.03	1.90	(3.84)
Debt per Equity ratio	0.95	0.90	0.61

# **Solartron Public Company Limited**

Annual financial statements
And
Audit Report of Certified Public Accountant

For the years ended 31 December 2012 and 2011

#### REPORT OF THE INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

#### THE SHAREHOLDERS OF SOLARTRON PUBLIC COMPANY LIMITED

I have audited the accompanying financial statements of Solartron Public Company Limited, which comprise the statement of financial position as at 31 December 2012, and the related statements of comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statement in accordance with Thai Financial Reporting Standard, for such internal control as management determines is necessary to enable the preparation of financial statement that are free from material misstatement, whether due to fraud or error.

#### **Auditor's Responsibility**

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Thai Standards on Auditing. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

#### **Opinion**

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Solartron Public Company Limited as at 31 December 2012, and their financial performance and cash flows for the year then ended, in accordance with Thai Financial Reporting Standards.

#### **Others**

The financial statement for the year ended 31 December 2011, as presented herein for comparative purposes, were audited by another auditor in the same firm, whose report dated 28 February 2012, expressed an unqualified opinion on those financial statements.

Mr. Anusorn Kiatgungwalgri Certified Public Accountant No. 2109 ASV & ASSOCIATES LIMITED

Bangkok 28 February 2013

# **Financial Statement**

# **SOLARTRON PUBLIC COMPANY LIMITED**

#### STATEMENTS OF FINANCIAL POSITION

#### AS AT 31 DECEMBER 2012

**UNIT: BAHT** 

ASSETS	NOTES	2012	2011
CURRENT ASSETS			
Cash and cash equivalents	7	44,951,781	128,485,931
Trade and other receivables	8	462,750,039	283,275,817
Receivable not yet billed	9	169,945,082	3,867,160
Retention receivable	9	8,389,800	53,398,564
Claim receivables from insurance company	5	690,513,748	554,758,673
Inventories - net	10	103,267,264	110,387,408
Advance payment for machinery and equipment	11	124,726,523	263,100,000
Other current assets	12	56,040,208	19,500,905
TOTAL CURRENT ASSETS		1,660,584,445	1,416,774,458
NON CURRENT ASSETS			
Restricted fixed deposits at financial institutions	13	134,662,560	59,739,965
Property, plant and equipment - net	14	601,802,666	251,784,439
Intangible assets - net	15	9,342,313	4,739,074
Other assets	16	695,435	124,516,507
TOTAL NON CURRENT ASSETS		746,502,974	440,779,985
TOTAL ASSETS		2,407,087,419	1,857,554,443

The accompanying notes are an integral part of the financial statements.

# STATEMENTS OF FINANCIAL POSITION (CONTINUED)

# AS AT 31 DECEMBER 2012

**UNIT: BAHT** 

LIABILITIES AND SHAREHOLDERS' EQUITY	NOTES	2012	2011
CURRENT LIABILITIES			
Bank overdrafts and short-term loans from financial			
institutions	17	183,669,426	91,757,401
Trade and other payables	18	361,064,319	167,627,769
Construction revenue received in advance	9	17,647,120	44,429,204
Current portion of financial leases	19	2,658,992	1,159,401
Provision for flood damages	5	15,191,561	536,391,209
Amount due to consortium counterparty	5	551,964,885	-
Other current liabilities		28,175,868	17,222,236
TOTAL CURRENT LIABILITIES		1,160,372,171	858,587,220
NON CURRENT LIABILITIES			
Liabilities under financial leases - net	19	6,767,923	2,511,213
Convertible debentures	20	-	13,570,650
Provision for employee benefits	21	6,179,379	4,458,800
TOTAL NON CURRENT LIABILITIES		12,947,302	20,540,663
TOTAL LIABILITIES		1,173,319,473	879,127,883

The accompanying notes are an integral part of the financial statements.

# STATEMENTS OF FINANCIAL POSITION (CONTINUED)

# AS AT 31 DECEMBER 2012

**UNIT: BAHT** 

LIABILITIES AND SHAREHOLDERS' EQUITY	NOTES	2012	2011
(CONTINUED)			
SHAREHOLDERS' EQUITY			
Share capital			
Registered share capital			
719,452,723 ordinary shares of Baht 1 each	22	719,452,723	450,000,000
(31 December 2011 : 450,000,000 ordinary shares of			
Baht 1 each)			
Issued and paid-up share capital			
449,659,723 ordinary shares of Baht 1 each	22	449,659,723	398,233,078
(31 December 2011 : 398,233,078 ordinary shares of			
Baht 1 each)			
Premium on share capital	23	540,927,097	505,617,325
Retained earnings			
Appropriated - legal reserve	24	39,677,192	39,677,192
Unappropriated		171,833,901	516,649
Other component of equity		31,670,033	34,382,316
TOTAL SHAREHOLDERS' EQUITY		1,233,767,946	978,426,560
TOTAL LIABILITIES AND SHAREHOLDERS' EQU	JITY	2,407,087,419	1,857,554,443

The accompanying notes are an integral part of the financial statements.

## STATEMENTS OF COMPREHENSIVE INCOME

# FOR THE YEAR ENDED 31 DECEMBER 2012

			UNIT: BAHT
	NOTES	2012	2011
Revenues			
Revenue from sales of goods with installation services			
and construction of solar power plants	29	1,101,993,302	1,242,622,856
Revenue from sales of goods		51,942,342	24,076,787
Total revenues		1,153,935,644	1,266,699,643
Cost of sales			
Cost of sales - sales of goods with installation services			
and construction of solar power plants		862,819,144	1,148,479,250
Cost of sales - goods		48,011,381	23,886,840
Total cost of sales		910,830,525	1,172,366,090
Gross profit		243,105,119	94,333,553
Other income			
Excess compensation from insurance	5	15,389,111	-
Interest income		4,049,605	1,209,938
Gain (loss) on exchanges		3,625,377	(1,757,218)
Other income		4,003,995	2,086,645
PROFIT BEFORE EXPENSES		270,173,207	95,872,918
Selling expenses		(9,328,058)	(10,522,550)
Administrative expenses		(80,773,066)	(49,458,172)
Reversal of allowance for doubtful debts		2,808,299	2,616,194
Directors' remunerations		(1,862,000)	(1,781,800)
Finance costs		(4,361,251)	(7,439,932)

# STATEMENTS OF COMPREHENSIVE INCOME (continue)

## FOR THE YEAR ENDED 31 DECEMBER 2012

PROFIT BEFORE FINANCE COST		176,657,131	29,286,658
Corporate income tax		(5,339,879)	-
NET PROFIT FOR THE YEAR		171,317,252	29,286,658
Other comprehensive income			
Depreciation on surplus of fixed assets		(2,712,283)	(2,712,283)
OTHER COMPREHENSIVE INCOME FOR THE YEAR		(2,712,283)	(2,712,283)
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		168,604,969	26,574,375
EARNINGS PER SHARE			
Basic earnings per share	25	0.38	0.09

The accompanying notes are an integral part of the financial statements.

UNIT: BAHT

# STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

#### FOR THE YEARS ENDED 31 DECEMBER 2012

Other components

		Issued and				of equity	
	NOTES	paid-up share	Premium on share capital	Retained earn Appropriat ed Legal	nings (deficits)	Surplus on revaluation of fixed assets	
		capital		reserve	appropriated		Total
Balance at 1 January 2011		300,000,000	407,250,000	39,650,000	(26,360,122	37,094,599	757,634,477
Capital increase during the year		000,000,000	407,230,000	37,030,000	,	07,074,377	737,004,477
Legal reserve	22, 23	98,233,078	98,367,325	-	-	-	196,600,403
	24	-	-	27,192	(27,192)	-	-
Cumulative effect of change in accounting							
policy for employee benefits	21	-	-	-	(2,382,695)	-	(2,382,695)
Total comprehensive income for the year Balance at 31 December 2011					29,286,658	(2,712,283)	26,574,375
Capital increase during the year		398,233,078	505,617,325	39,677,192	516,649	34,382,316	978,426,560
	22, 23	51,426,645	35,309,772	-	-	-	86,736,417
Total comprehensive income for the year					171,317,252	(2,712,283)	168,604,969
Balance as at 31 December 2012		449,659,723	540,927,097	39,677,192	171,833,901	31,670,033	1,233,767,946

The accompanying notes are an integral part of the financial statements.

# SOLARTRON PUBLIC COMPANY LIMITED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED 31 DECEMBER 2012

		UNIT: BAHT
	2012	2011
CASH FLOWS FROM OPERATING ACTIVITIES		
Net profit before tax for the year	176,657,131	29,286,658
Adjustments for :		
Depreciation and amortization expenses	12,009,291	11,130,681
Reversal of allowance for doubtful debts	4,934,483	167,624
Unrealized loss on foreign exchange rates - net	402,337	1,139,259
Allowance for obsolete inventories (reversal)	126,865	(85,477)
Reversal of allowance for diminution in value of inventories	(366,654)	(2,630,421)
Withholding income tax deducted at source written off	2,546,073	-
Gain on disposal of fixed assets	(710,401)	-
Excess compensation from insurance	(15,389,111)	-
Loss on fixed assets written off	784,405	-
Interest expenses	4,361,251	7,439,932
Profit before changes in operating assets and liabilities	185,355,670	46,448,256
Changes in operating assets (increase) decrease		
Trade and other receivables	(184,441,067)	(143,569,587)
Retentions receivable	45,008,764	(48,360,259)
Receivable not yet billed	(166,077,922)	10,424,553
Claim receivable from insurance company	(135,756,275)	(554,758,673)
Inventories	7,359,933	197,059,318
Other current assets	(47,095,251)	15,146,636
Other non current assets	3,894,549	(426,239)
Changes in operating liabilities increase (decrease)		
Trade and other payables	193,066,575	(111,049,783)
Construction revenue received in advance	(26,782,084)	(37,687,688)
Provision from flood damages	(505,809,337)	536,391,209
Amount due to counterparty under consortium	551,964,885	-
Provision for employee benefits	1,720,579	2,076,105
Other current liabilities	10,952,562	(9,264,143)

# STATEMENTS OF CASH FLOWS (continue)

#### FOR THE YEARS ENDED 31 DECEMBER 2012

		UNIT: BAHT
	2012	2011
Cash generated from operating activities	(66,638,419)	(97,570,295)
Cash paid for interest expenses	(4,361,251)	(7,439,932)
Cash received from withholding tax deducted of source	8,010,451	-
Withholding income tax deducted at source	(5,339,385)	(6,154,121)
Net cash used in operating activities	(68,328,604)	(111,164,348)
CASH FLOWS FROM INVESTING ACTIVITIES		
(Increase) decrease in restricted fixed deposits at financial institutions	(74,922,595)	7,170,114
Advance payment for machinery and equipment	(80,380,000)	-
Acquisition of property, plant and equipment	(26,390,190)	(1,910,856)
Acquisition of intangible assets	(5,062,040)	(2,145,400)
Proceeds from disposal of fixed assets	715,186	
Net cash provided by (used in) investing activities	(186,039,639)	3,113,858
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase in bank overdrafts and short-term loans		
from financial institutions	91,912,025	22,300,859
Short-term loans from related party	-	8,820,000
Repayments of short-term loans from related party	-	(13,320,000)
Increase in long-term financial leases	7,555,079	-
Payments for liabilities under financial leases	(1,798,778)	(1,368,919)
Cash received from issuance of convertible debentures	84,000,000	228,370,650
Cash paid for convertible debenture issuance expenses	(6,863,583)	(18,199,597)
Repayment of convertible debentures to debenture holder	(3,970,650)	-

# STATEMENTS OF CASH FLOWS (continue)

#### FOR THE YEARS ENDED 31 DECEMBER 2012

		UNIT: BAHT
Net cash provided by financing activities	170,834,093	226,602,993
Net increase (decrease) in cash and cash equivalents	(83,534,150)	118,552,503
Cash and cash equivalents as at 1 January	128,485,931	9,933,428
Cash and cash equivalents as at 31 December	44,951,781	128,485,931
ADDITIONAL DISCLOSURE ITEMS TO CASH FLOWS STATEMENTS		
Significant non-cash items consist of :-		
- Set aside legal reserve from net profit	-	27,192
- Depreciation of surplus on revaluation of fixed assets	2,712,283	2,712,283
- Adjustment of retirement benefit obligation to offset with beginning		
retained earnings	-	2,382,695
<ul> <li>Increase of ordinary share as a result of conversion of convertible debentures</li> </ul>	51,426,645	98,233,078
- Increase of premium on share capital as a result of conversion of		
convertible debenture	42,173,355	116,566,922
- Transferring of advance payment for machinery to property,		
plant and equipment	338,680,000	-
- Transferring of advance payments for raw materials and deferred Charges		
to advance payment for machinery and equipment	119,926,523	-

The accompanying notes are an integral part of the financial statements.

#### 1 GENERAL INFORMATION: -

1.1 Registration Solartron Public Company Limited was incorporated as a limited company in Thailand

on 12 November 1986. Subsequently, the Company registered to be a public company limited with the Department of Business Development on 24 September 2004 and was

subsequently listed in The Stock Exchange of Thailand on 17 March 2005.

**1.2** Office location The registered office is located at 1000/65,66,67, P.B.Tower 16<sup>th</sup> Floor, Soi Sukhumvit 71,

Sukhumvit Road, North Klongton, Wattana, Bangkok 10110, Thailand.

1.3 Main activities The Company is engaging in assembly, selling and installation of solar-cell systems and

related equipment.

#### 2. BASIS OF FINANCIAL STATEMENTS PRESENTATION

- 2.1 The financial statements are prepared in accordance with Thai Accounting Standards ("TAS") and Thai Financial Reporting Standards ("TFRS") including related interpretations and guidelines promulgated by the Federation of Accounting Professions ("FAP") and the presentation of the financial statements has been made in compliance with the stipulations of the Notification of the Department of Business Development dated 28 September 2011 under the Accounting Act B.E. 2543, being those Thai Financial Reporting Standards issued under the Accounting Professions Act B.E. 2547, and the financial reporting requirements of the Securities and Exchange Commission (SEC).
- 2.2 The financial statements have been prepared on a historical cost basis except where otherwise disclosed in the accounting policies.
- 2.3 The preparation of financial statements in conformity with TAS and TFRS requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. Actual results may differ from estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revision to accounting estimates are recognised in the period in which the estimate is revised and in any future periods affected.
- **2.4** For the convenience of the users, an English translation of the financial statements has been prepared from the financial statements issued in Thai language.

## 3. ADOPTION OF NEW ACCOUNTING STANDARDS

3.1 The new and revised financial reporting standards as announced by the FAP, which are mandatory for the financial year beginning on or after 1 January 2013, are as follows:-

### **Accounting standards**

TAS 12 Income taxes

TAS 20 (Revised 2009) Accounting for Government Grants and Disclosure of

Government Assistance

TAS 21 (Revised 2009) The Effects of Changes in Foreign Exchange Rates

Thai Financial Reporting Standard

TFRS 8 Operating Segments

**Accounting Standard Interpretations** 

SIC 10 Government Assistance - No Specific Relation to

Operating Activities

SIC 21 Income Taxes - Recovery of Revalued Non-Depreciable

Assets

SIC 25 Income Taxes - Changes in the Tax Status of an Entity or

its Shareholders

**FAP Announcements** 

No. 34/2555 Accounting Treatment Guidance for Transfers of

Financial Assets

The Company's management has assessed the effect of the accounting standards and accounting standard interpretations and believes that these standards will not have significant impact on the financial statements for the year in which they are effective.

However, for TAS 12 "Income Taxes" the Company's management has evaluated the effect of this accounting standard and has not been able to reach a conclusion as to its' effect to the financial statements for the year in which it is effective.

3.2 The new and revised financial reporting standards as announced by the FAP, which are mandatory for the financial year beginning on or after 1 January 2014, are as follows:-

# **Accounting Standard Interpretations**

SIC 29 Service Concession Arrangements: Disclosures

# **Financial Reporting Standard Interpretations**

TFRIC 4 Determining whether an Arrangement contains a

Lease

TFRIC 12 Service Concession Arrangements
TFRIC 13 Customer Loyalty Programmes

The Company's management has assessed the effect of the accounting standard interpretations and financial reporting standard interpretations and believes that these standards will not have significant impact on the financial statements for the year in which they are effective.

#### 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

# 4.1 Recognition of revenues

## Revenue from sales of goods with installation service and construction of solar power plant

Revenue from the sales of goods with installation service and construction of solar power plant are recognised in the statement of the comprehensive income when the installation is completed, the customer has accepted the installation and sales invoice has been issued to the customer. In case of revenue from sales of goods with installation service and construction of solar power plant which are long term, the revenue is recognised in the statement of comprehensive income using the percentage of completion method. The percentage of completion is measured based on comparison of actual construction costs incurred up to the end of the year and total anticipated total construction costs to be incurred to complete the project. The revenue recognised but not yet due per contract is presented under the caption of "Receivable not yet billed" in the statement of financial position.

# Sale of goods

Revenue from sales of goods is recognised in the statement of comprehensive income when the significant risks and rewards of ownership have been transferred to the buyer. No revenue is recognised if there is continuing management involvement with the goods or there are significant uncertainties regarding recovery of the consideration due, associated costs or the probable return of goods.

Revenue is an invoice value excludes value added taxes and is calculated after deduction of discount and allowance.

# Other income and expenses

Other income and expenses are recognised in the statement of comprehensive income on an accrual basis.

## 4.2 Cash and cash equivalents

Cash and cash equivalents comprise cash balances, call deposits and highly liquid short-term investments with an original maturity of three months or less and not subject to restrictions.

Cash deposits at financial institution that has a restriction of use are presented separately as "Restricted fixed deposit at financial institution" under "Non-current assets" in the statement of financial position.

#### 4.3 Accounts receivable - trade

Accounts receivable - trade are stated at the net realisable value. Allowance for doubtful accounts is provided for the estimated losses that may be incurred in collection of receivables. The allowance is based on analysis of debtor aging and the current status of receivables outstanding on the statements of financial position date.

## 4.4 Receivable not yet billed and construction revenue received in advance

Receivable not yet billed comprises costs of materials, labour, subcontractor charges, services and overheads plus the attributable net gains or losses less the amounts already billed to customers.

The excess value of a construction contract in progress over the amount billed to the customer is presented under "Receivable not yet billed" in current assets. The excess of the amount billed to the customer over the value of the construction in progress is presented under "Construction revenue received in advance" under current liabilities.

#### 4.5 Inventories

Inventories are stated at the lower of cost or net realisable value.

Cost is calculated using the specific identification method and comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. In case of manufactured finished goods and work-in-progress, cost includes an appropriate allocation of direct labour and overheads based on normal operating capacity.

Net realisable value is estimated based on selling price in the ordinary course of business less the estimated costs necessary to incur sale.

The Company provides for allowance for obsolete and slow moving stocks by evaluating each inventory item at year end.

## 4.6 Property, plant and equipment and depreciation

Land was recorded at cost while plant and equipment were recorded at cost net of accumulated depreciation and allowance for impairment. However, the Company chooses to present value of land and land improvement, building and building improvement and machinery and factory equipment at their revalued amounts. The revalued amount is the fair value determined on the basis of the property's existing use at the date of revaluation less any subsequent accumulated depreciation and impairment losses.

Revaluation is performed by independent authorised appraiser to ensure that the carrying amount of these assets does not differ materially from that which would be determined using fair values at the reporting date.

Any increase in value on revaluation, is credited to "Surplus on revaluation of fixed assets" under other component of equity in the statement of changes in shareholders equity unless it offsets a previous decrease in value recognised in the statement of comprehensive income in respect of the same asset. A decrease in value is recognised in the statement of comprehensive income to the extent it exceeds an increase previously recognised in the other component of equity in respect of the same asset.

Surplus on revaluation of fixed assets is depreciated on a straight line basis according to their useful lives and recorded directly to the account "Surplus on the revaluation of fixed assets" in the statement of comprehensive income.

Depreciation is charged to the statement of comprehensive income on a straight-line basis over the estimated useful life of each asset. The estimated useful lives of assets are as follows:

Land improvements	5, 10 and 20	years
Buildings and building improvement	5 - 25	years
Machinery and factory equipment	20	years
Furniture, fixtures and office equipmen	t 5	years
Motor vehicle	5	vears

No depreciation is provided on land and assets under construction or installation until the assets are ready to use.

## 4.7 Intangible asset

Intangible asset is stated at cost less accumulated amortisation and impairment loss. Amortisation is charged to the statement of comprehensive income on a straight-line basis over the estimated useful lives of assets which are as follows:

Computer software 5 years Industrial standard certificate 25 years

No amortisation charged to software under installation.

## 4.8 Operating lease

Lease in which substantially all the risks and rewards of ownership of assets remain with the lessor is accounted for as operating lease. Rentals applicable to such operating leases are charged to the statement of comprehensive income over the lease term.

#### 4.9 Financial lease

Lease in which substantially all the risks and rewards of ownership are transferred to the Company is accounted for as financial lease. At the inception, the fair value of the lease assets is recorded together with the obligation. The lease asset is depreciated using the straight-line method over their estimated useful lives. Interest or finance charges and depreciation are recognised as expenses in the statement of comprehensive income.

## 4.10 Impairment of assets

The carrying amount of the Company's assets is reviewed at each of the statement of financial position date to determine whether there is any indication of impairment. If any such indication exists, the recoverable amount of the Company's asset will be estimated.

An impairment loss is recognised whenever the carrying amount of an asset or its cashgenerating unit exceeds its recoverable amount. The impairment loss is then recognised in the statement of comprehensive income.

#### Calculation of recoverable amount

The recoverable amount is the higher of the assets' net selling price or value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pretax discount rate that reflects current market assessments of the time value of money and the risks specific to the assets. For an asset that does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

#### Reversals of impairment

An impairment loss is reversed if there is a change in the estimates used to determine the recoverable amount.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised. Impairment loss is recognised in the statement of comprehensive income.

## 4.11 Foreign currency transaction

Transaction during the year denominated in foreign currencies is converted into Baht at the rate of exchange prevailing on the transaction date. Monetary assets and liabilities at the date of statement of financial position denominated in foreign currencies are translated into Baht at the reference exchange rates as determined by the "Bank of Thailand" at that date. Gains or losses on exchange arising on settlements and translation are recognised as income or expense in the statement of comprehensive income.

# 4.12 Employee benefits

## Short-term employee benefits

Salaries, wages, bonuses and contributions to the social security fund are recognised as expenses when incurred.

## **Defined contribution plans**

The Company and its employees have jointly established a provident fund. The fund is monthly contributed by employees and by the Company. The fund's assets are held in a separate trust fund and the Company's contributions are recognised as expenses when incurred.

## Defined benefit plans

The Company has obligations in respect of the severance payments, it must make to employees upon retirement under labour law and the pension payment which is post-employment benefits. The Company treats these severance payment and the pension payment obligations as a defined benefit plan.

The obligation under the defined benefit plan is determined by a professionally qualified independent actuary based on actuarial techniques, using the projected unit credit method.

Actuarial gains and losses arising from post-employment benefits are recognised immediately in the statements of comprehensive income.

# 4.13 Corporate income tax

Corporate income tax is calculated based on the taxable income determined in accordance with income tax legislation.

Non - BOI business operations are subjected to corporate income tax at the rate of 23 per cent (2011: 30 per cent).

#### 4.14 Provision

A provision is recognised in the statement of comprehensive income when the Company has a present legal or constructive obligation as a result of a past event, and it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability.

## 4.15 Basic earnings per share

Basic earnings per share is calculated by dividing the net profit for the year by the weighted average number of ordinary shares held by outside shareholders in issue during the year.

#### 5. IMPACT FROM THE FLOOD IN 2011

Following to the severe flooding in Thailand during the 4th quarter of 2011, the Company's 34.5 MW solar power plant project under a Consortium agreement in Ayudhaya Province (estimated 95% of completion as of 31 December 2011) had been affected.

For the year ended 31 December 2011, the Company recognised loss from flood incident and compensation from insurance company of Baht 554.76 million in the statement of comprehensive income. Compensation receivable from insurance companies and provision for flood damages of Baht 554.76 million and Baht 536.39 million, respectively, were shown in the statement of financial position as of 31 December 2011.

During the year 2012, the Company adjusted the estimated loss from flood damages in addition of Baht 196.95 million (previously Baht 554.76 million to Baht 751.70 million). Provision for flood damages of Baht 15.19 million was shown in the statement of financial position as of 31 December 2012.

Subsequently on 26 November 2012, the loss assessment from flood incident has been finalised and the Company as the beneficiary under the Consortium has been approved for the claim in sum of Baht 1,671.77 million of which Baht 904.68 million has been set aside to the counterparty under the Consortium, and Baht 767.09 million was belonged to the Company. The effect from the flood incident can be summarised as follows:-

2012	2011	(Unit: Million Baht) Total
212.33	554.76	767.09
(196.94)	(554.76)	(751.70)
15.39	-	15.39
	212.33 (196.94)	212.33 554.76 (196.94) (554.76)

As of 31 December 2012, compensation receivable from insurance companies and amount due to counterparty under the Consortium of Baht 690.51 million and Baht 551.96 million were shown in the statement of financial position.

# 6. JUDGEMENTS AND IMPORTANT ACCOUNTING ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles at times requires management to make subjective judgments and estimates regarding matters that are inherently uncertain. These judgments and estimates affect reported amounts and disclosures and actual results could differ. Significant judgments and estimates are described as follow:-

#### Allowance for doubtful debts

Allowance for doubtful debts is intended to adjust the value of accounts receivable for possible credit risk. The management uses judgment to establish reserves for estimated losses for each outstanding debtor. The allowance for doubtful debts is determined through a combination of analysis of debt aging, collection experience, and taking into account changes in the prevailing economic conditions. However, the use of different estimates and assumptions could affect the amounts of allowances for receivable losses and adjustments to the allowances may therefore be required in the future.

## **Estimated construction project costs**

The Company estimates costs of construction project based on details of the blue prints, taking into account the volume and value of construction materials to be used in the project, labour cost and other miscellaneous cost to be incurred to complete to project. The company takes into account the tendency of fluctuation in construction material, direct labour, and other costs. Estimates are reviewed consistently or whenever actual costs differ significantly from the figures used in the original estimates.

# Plant and equipment, and depreciation

In calculating depreciation of plant and equipment, the management estimates useful lives of plant and equipment and reviews the depreciation when useful lives are differ materially from previous year or when the Company writes off non-operating plant and equipment by sales or disposal of plant and equipment.

**Total** 

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7. CASI	I AND	CASH	EQUIV	<b>ALENTS</b>
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	2012	2011
Cash on hand	353,528	250,000
Cash at banks - Checking accounts	20,135,083	953,343
Cash at banks - Saving accounts	24,463,170	127,282,588
Total	44,951,781	128,485,931
Trade and other receivables		
induc dild office receivables	2012	2011
Trade accounts receivable	480,931,992	288,497,183
Less Allowance for doubtful debts	(22,357,438)	(17,433,872)
Trade accounts receivable - net	458,574,554	271,063,311
Other receivable	4,175,484	12,212,506
Total trade and other receivables	462,750,039	283,275,817
	2012	2011
Current	386,624,535	10,075,277
Overdue	000,02 1,000	10,010,211
- Not over 3 months	70,324,695	217.254.767
- Over 3 months to 6 months	1,675,272	33,225,870
- Over 6 months to 12 months	3,040,987	3,253,638
- Over 12 months	19,266,503	24,687,631

During August and December 2010, the Company and one foreign company under the consortium have entered into construction of two Solar Power Plant contracts to one local company at Aydhaya province. The details of the contracts are summarised as follows:-

480,931,992

(Unit: Million Baht)

288,497,183

	Plant	Contr	Contract		The Company' s share of income approxim	Outsto acco receiv as o Dece	ounts vable f 31	Reter as c Dece	of 31
Contra ct No.	size (MW)	act value	starting periods	Delivery periods	ately 36 per cent	2012	2011	2012	2011
1	34.5	2,843	August 2010	November 2011	1,017	52	184	-	42
2	9.43	767	December 2010	November 2011	273	_	34	-	12
		3,610			1,290	52	218		54

In August 2011, the Company and the foreign company under the consortium had completed and delivered the second power plant to the customer. For the first contract, the power plant expected to be delivered in November 2011. However, it was affected by the flood incident which caused damages to both solar power plants. However, according to the terms of the contracts, the consortium is able to extend the delivery dates in case of unexpected natural disasters (Force Majeure).

In February 2012, the Company and the foreign company under the consortium has entered into Addendum Contracts of the 9.43 MW and 34.5 MW solar power plants which are additional project works to restore and complete both solar power plants. Details of the Addendum Contracts can be summarised as follows:-

Addendum contract No.	Project value (Million Baht)	Delivery period
1. Addendum 34.5 MW	Nil (*)	July 2012
2. Addendum 9.43 MW	176.14	April 2012

\*Actual cost for this project work contract is claimable from insurance company.

In May 2012, the Company under the consortium had completed and delivered the second contract (9.43 MW solar power plant) to the counterparty of the contract.

As of reporting date, the Company is in the process of completing and delivering the 34.5 MW solar power plant to the counterparty. The counterparty has signed an agreement to supply solar power electricity from this 34.5 MW solar power plant to the Electricity Generating Authority of Thailand since April 2012. The delivery is expected to be completed in the first quarter of 2013.

As of 31 December 2012 and 2011, the Company had transferred the right to receive cash collections from its receivable of Baht 2,133.11 million and Baht 1,028.22 million, respectively, to several local banks to secure credit facilities granted by the banks (Note 17).

As of 31 December 2011, the Company had transferred its right to receive cash collections from its receivable from the first project (Plant size 34.5 MW) of Baht 243.8 million (31 December 2012: Nil) to the counterparty under consortium agreement to secure the letter of credit in respect of the purchasing of equipment for solar power plant construction.

# 9. RECEIVABLES NOT YET BILLED AND CONSTRUCTION REVENUE RECEIVED IN ADVANCE

		2012	2011
	Total long-term construction contract value which the Company is entitled to receive	2,805,253,666	1,328,002,404
	Retentions as per contract	8,389,800	53,398,564
	Unbilled receivables		
	Revenue recognised on percentage of completion		
	basis	1,992,102,934	5,766,400
	Less: Value of contract billed	(1,822,157,852)	(1,899,240)
	Receivables not yet billed	169,945,082	3,867,160
	Construction revenue received in advance		
	Value of contract billed	88,358,456	1,299,914,613
	<u>Less:</u> Revenue recognised on percentage of completion basis	(70,711,336)	(1,255,485,409)
	Construction revenue received in advance	17,647,120	44,429,204
	Construction revenue received in advance	.,,,,,,,,	,, ,
10.	INVENTORIES - NET		
		2012	2011
	Finished goods	27,092,410	55,331,981
	Raw materials	41,077,105	53,244,460
	Work in process	-	2,093,943
	Spare parts and supplies	1,941,510	919,515
	Goods in transit	34,212,575	93,633
		104,323,600	111,683,532
	Less Allowance for diminution in value and obsolete	(1 054 224)	(1 204 124)
	of inventories	(1,056,336)	(1,296,124)
	Total	103,267,264	110,387,408

#### 11. ADVANCE PAYMENT FOR MACHINERY AND EQUIPMENT

Being advance payment for the supply of machinery and equipment for solar cell factory with a foreign cell factory supplier amounting to Euro 17.9 million, the Company had paid partial advance payment of Euro 5.60 million (Baht 263.00 million). Subsequently, during 2011, both parties had negotiated and amended the contract value to Euro 11.30 million. Therefore, as of 31 December 2011, the Company had remaining commitment amounting to Euro 5.79 million (Baht 236.58 million)

During May 2012, the Company had additionally paid Euro 2.0 million (approximately Baht 80.38 million). In September 2012, the Company entered into another supplementary agreement to change the contract value from Euro 11.39 million to Euro 13.89 million and the cell factory supplier agreed to increase the production capacity from 58.95 MW to 70 MW. The Company is not required to pay for the additional amount of Euro 2.5 million but the cell factory supplier will claim this amount from the wafer supplier who the Company had previous paid totalling Euro 2.5 million (Baht 119.90 million) (Note 16)

Movement of advance payments for machinery and equipment for the year ended 31 December 2012 can be summarised as follows:-

		Advance payment for machinery and equipment	
		Million Euros	Baht
	Beginning balance as at 1 January 2012	5.60	263,100,000
	Payment during 2012	2.00	80,380,000
	Total	7.60	343,480,000
	Transferred from advance payment of raw material (Wafer) (Note 16) Total Transferred to plant and equipment amount	2.50 10.10 (7.48)	119,926,523 463,406,523 (338,680,000)
	Ending balance as at 31 December 2012	2.62	124,726,523
12.	OTHER CURRENT ASSETS	2012	2011
	Advance payments for project construction and others Value added tax receivable Withholding income tax deducted at source Others	30,726,563 12,124,814 - 13,188,831	5,044,415 699,222 10,556,524 3,200,744
	Total	56,040,208	19,500,905

# 13. RESTRICTED FIXED DEPOSITS AT FINANCIAL INSTITUTIONS

This account represents three-month fixed and saving deposits with commercial banks which have been pledged as collateral for bank guarantees issued to certain governmental and private organisations, as well as to secure overdrafts lines, and other credit facilities granted by the depository banks (Note 17, 31.1 and 31.2).

# 14. PROPERTY, PLANT AND EQUIPMENT - NET

	Lands and land improveme i	Building and Building mproveme nt	Machinery and factory equipmen t	Furniture, fixture and office equipment	Motor Vehicles	Assets under constructi on and installatio n	Total
Cost / Revaluation							
31 December 2011	48,741,254	43,598,330	52,979,778	35,942,739	23,213,722	149,218,721	353,694,544
Acquisition/transfer red in	-	2,120,274	2,597,405	3,914,652	10,534,336	345,903,523	365,070,190
Disposal/transferre d out		(18,500)	(2,342,126)	(14,301,510)	(2,317,015)		(18,979,151)
31 December 2012 Accumulated	48,741,254	45,700,104	53,235,057	25,555,881	31,431,043	495,122,244	699,785,583
depreciation:							
31 December 2011 Depreciation for	12,318,233	15,883,463	51,869,164	25,576,441	19,060,375	-	124,707,676
the year Depreciation of	1,926,497	2,365,478	388,431	4,687,061	2,183,023	-	11,550,490
revaluation 31 December 2012	14,244,730	(3,415)	(1,826,291) 50,431,304	(14,051,848) 16,211,654	(2,308,407) 18,934,991		(18,189,961) 118,068,205
Surplus on revaluation:							
31 December 2011 Increase during the	-	8,005,440	31,801,442	-	-	-	39,806,882
year							
31 December 2012 Accumulated deprecia revaluation:	ation - Surplus	8,005,440 on	31,801,442				39,806,882
31 December 2011	-	964,328	4,460,238	-	-	-	5,424,566
Increase during the year		482,164	2,230,119				2,712,283
31 December 2012		1,446,492	6,690,357				8,136,849
Allowance for impairm	ent loss:						
31 December 2011 Increase during the	10,524,186	1,060,559	-	-	-	-	11,584,745
year							
31 December 2012	10,524,186	1,060,559					11,584,745
Net book value:							
31 December 2012	23,972,338	32,952,967	27,914,838	9,344,227	12,496,052	495,122,244	601,802,666
31 December 2011	25,898,835	33,695,420	28,451,818	10,366,298	4,153,347	149,218,721	251,784,439
Depreciation	on charges fo	r the years c	ıre included	in :-	2012		2011
Production cost and cost of goods sold Administrative expenses  10,290,309 10,661,017 11,550,490 11,023,257							

As at 31 December 2012 and 2011, the Company's lands and land improvement amounting to Baht 17.28 million and Baht 36.81 million, respectively, have been mortgaged as collateral under a credit facility agreement with one local bank (Note 17 and 31.3).

As at 31 December 2012 and 2011, there were certain machinery and equipment and motor vehicles which were fully depreciated and still in use totalling of Baht 70.93 million and Baht 85.14 million respectively.

As of 31 December 2012 and 2011, the Company has a construction and system implementation agreement with a local consortium and paid the partial advance amounting to Baht 129.93 million (Note 31.6).

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#### 15. INTANGIBLE ASSETS - NET

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Balance as at 31 December 2012	4,116,418	5,225,895	-	9,342,313
amortisation	841,412			841,412
Decrease in accumulated				
Amortisation/Transferred-out	(264,885)	(193,916)	-	(458,801)
Disposals/Transferred-out	(841,500)	-	(2,769,000)	(3,610,500)
Purchases/Transferred-in	4,127,120	3,478,008	226,000	7,831,128
Balance as at 1 January 2012	254,271	1,941,803	2,543,000	4,739,074
	software	certificate	installation	Total
	Computer	Standard	under	
		Industrial	Software	

Amortisation charges for the year are included in administrative expense.

#### 16. OTHER NON CURRENT ASSETS

During 2006 and 2007, the Company had entered into two Long Term Wafer Supply Agreements with a foreign company (wafer supplier). Under the agreements, the Company agrees to pay a non-refundable and irrevocable advance payment totalling Euro 12.0 million whereby payments were to be made from 2006 to 2009. During 2006, the Company had paid advance payment totalling Euro 2.16 million and had the remaining commitment of Euro 9.84 million of which the Company had negotiated the payments of this advance payments for several times.

In September 2012, the Company has entered into supplemental agreement with the supply of machinery and equipment for solar cell factory supplier (Note 11). One of the main conditions is to terminate these two Long Term Wafer Supply agreements of Euro 12.0 million including the remaining commitment of Euro 9.84 million, including the advance payments of raw material and deferred charges totalling Euro 2.5 million that the Company previously paid to the wafer supplier shall be transferred to the solar cell factory supplier.

Movement of advance payments for raw material can be summarised as follows:-

	2012		20	11
	Million Euros	Baht	Million Euros	Baht
Advance payment for raw material				
Balance - 1 January 2012 Advance payment for raw	2.50	119,926,523		-
material		-	2.16	103,016,826
Deferred charges			0.34	16,909,697
Total advance payment for raw material  Transferred to advance for	2.50	119,926,523	2.50	119,926,523
machinery and equipment account (Note 11)	(2.50)	(119,926,523	-	

Total	695,435		124,516,507
Other non current assets	695,435		4,589,984
Ending balance of advance payment for raw material	<u>-                                      </u>	2.50	119,926,523

#### 17. BANK OVERDRAFTS AND SHORT-TERM LOANS FROM FINANCIAL INSTITUTIONS

Total		183,669,426		91,757,401
Trust receipts and promissory notes	2.00 - 6.00	161,325,097	1.50 – 7.00	72,060,704
Bank overdrafts	5.00 – 7.775	22,344,329	5.87 – 6.875	19,696,697
	Interest rate per annum	2011	Interest rate per annum	2010
	Interest rate		Interest rate	

As at 31 December 2012 and 2011, the Company has overdrafts and other credit facilities with several local banks totalling of Baht 1,399 million and Baht 3,126 million, respectively, which are collateralised by the right to receive collections from solar power plant (Note 8), restricted fixed deposits (Note 13), the mortgage of land, plant and machinery (Note 14), and a director's personal guarantee.

## 18. TRADE AND OTHER PAYABLES

	2012	2011
Trade payable	339,240,218	149,079,410
Other payable		
Accounts payable - construction	5,937,004	5,937,004
Accrued expenses	7,474,629	3,165,386
Advanced received from customers	1,182,368	3,441,976
Others	7,230,100	6,003,993
Total other payable	21,824,101	18,548,359
Total Trade and other payables	361,064,319	167,627,769

#### 19. LONG TERM FINANCIAL LEASES - NET

As at 31 December 2012 and 2011, the Company has motor vehicle and equipment financial leases with certain local leasing companies for the periods between 29 and 48 months. The Company is committed to pay the minimum future lease payments as follows:-

	2012	2011
Within 1 year	3,087,259	1,352,253
1 - 4 years	7,204,939	2,734,930
Total minimum lease payments	10,292,198	4,087,183
<u>Less</u> Deferred interest	(865,283)	(416,569)
Present value of minimum lease payments	9,426,915	3,670,614
Less Portion due within 1 year – net	(2,658,992)	(1,159,401)
Net	6,767,923	2,511,213

#### 20. CONVERTIBLE DEBENTURES

On 29 April 2011, the shareholders in the Annual General Meeting resolved the Company to issue and sell convertible debentures to a specific foreign investor (Private Placement) in the amount not exceeding SGD 20 million.

Details of the convertible debentures are as follows:-

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Type of debentures - Convertible debentures to be issued to specific or bearer debenture holders with the right to convert to company's

ordinary shares.

Amount - Not exceeding SGD 20 million (Baht 480 million at the

exchange rate of Baht 24/SGD) or other equivalent foreign

currencies.

Term - 3 years.

Interest - 2% per annum.

Exercise period - Any time as from the issuance date.

Number of ordinary shares - . Not exceeding 150 million ordinary shares of Baht 1 each.

reserved for the convertibility

Movement of the convertible debentures for the nine-month period ended 31 December 2012 can be summarised as follows:-

	Convertible debentures
Convertible debentures as of 31 December 2011	13,570,650
Cash received from issuance of convertible debenture (Note 22.1)  Debenture holders exercised the right to convert during the year (Note	84,000,000
22.1)	(93,600,000)
Repayment to debenture holders during the year	(3,970,650)
Convertible debentures as of 31 December 2012	

During March 2012, the debenture holders had wholly exercised the right to convert to equity to the maximum limit of not exceeding 150,000,000 shares which was approved by the Shareholders in Annual General Meeting on 29 April 2011. The Company received total cash from 2011 to 2012 from issuance of convertible debentures totalling Baht 312.37 million. The debenture holders had exercised the right to convert to equity totalling Baht 310.80 million by which ordinary shares were issued by Baht 149.66 million (149,659,723 shares at par value of Baht 1 each), the premium on share capital was increased by Baht 161.14 million. The remaining convertible debentures of Baht 3,970,650 (approximately SGD 150,000) was repaid by the Company in full to the debenture holders on 6 March 2012.

#### 21. PROVISIONS FOR EMPLOYEE BENEFITS

The Company adopted TAS 19 Employee Benefits as from 1 January 2011 and the Company chose to adjust the effect of the adoption of this accounting standard with the beginning retained deficit as at 1 January 2011 amounting of Baht 2,382,695.

The movement in the present value of the defined benefit obligations for the year ended 31 December 2012 can be summarised follows: -

2012	2011
4,458,800	2,382,695
1,059,476	829,497
200,646	107,221
534,957	1,139,387
(74,500)	-
6,179,379	4,458,800
	<b>4,458,800</b> 1,059,476 200,646 534,957 (74,500)

#### 22. SHARE CAPITAL

22.1 On 29 April 2011, the shareholders in the Annual General Meeting passed the resolution to increase the Company's registered capital by Baht 150 million (150 million shares at Baht 1 each) from the current capital of Baht 300 million (300 million shares at Baht 1 each) to Baht 450 million (450 million shares at Baht 1 each) by issuing 150 million ordinary shares at 1 Baht each. The issuance is reserved for the exercise of debenture holders (Note 20) and the Company had registered the capital increase with the Ministry of Commerce on 2 May 2011.

During the year, details of cash received from issuance of convertible debentures and exercising of convertible debenture can be summarised as follows:-

	2012	2011
Cash received from issuance of convertible debentures	84,000,000	228,370,650
Exercise of convertible debenture to equity (Note 20)	93,600,000	214,800,000
Increase in ordinary shares (Note 20)	51,426,645	98,223,078
Increase in premium on share capital (Note 23)	42,173,355	116,566,922

- **22.2** On 27 April 2012, the shareholders in Annual General Meeting for the year 2011 passed the resolution to decrease the Company's registered share capital from Baht 450,000,000 (450,000,000 shares at par value of Baht 1 each) to Baht 449,659,723 (449,659,723 shares at par value of Baht 1 each) by reducing the number of remaining registered shares reserved for allotment of convertible debentures totalling Baht 340,277 (340,277 shares at par value of Baht 1 each) to be in conformity with the cancellation of the remaining convertible debentures not exercised. The Company had registered the capital decrease with the Ministry of Commerce on 14 May 2012.
- 22.3 On 27 April 2012, the shareholders in Annual General Meeting for the year 2011 passed the resolution to increase the Company's share capital under a General Mandate by issuing new ordinary shares of Baht 269,793,000 (269,793,000 shares at par value of Baht 1 each). The details of the allotments are as follows:-
  - For the existing shareholders in proportion to the shareholders not exceeding 134,897,000 shares.
  - For general public not exceeding 89,931,000 shares.
  - For specific persons not exceeding 44,965,000 shares.

The shareholders in Annual General Meeting also passed the resolution to increase the Company's registered share capital from Baht 449,659,723 (449,659,723 shares at par value of Baht 1 each) to Baht 719,452,723 (719,452,723 shares at par value of Baht 1 each) by issuing new ordinary shares of Baht 269,793,000 (269,793,000 shares at par value of Baht 1 each). The increase in registered share capital is reserved for the share issuance under the general mandate as discussed above. The Company had registered the capital decrease with the Ministry of Commerce on 15 May 2012.

#### 23. PREMIUM ON SHARE CAPITAL

The premium on share capital account was recorded under Section 51 of the Public Companies Act B.E. 2535, which requires a company to book proceeds from share subscription received in excess of the par value of the issued shares to the "premium on share capital account". The account is not available for dividend distribution.

The movement of premium on share capital for the year ended 31 December 2012 and 2011 is as follow:-

	2012	2011
Premium on share capital as at 1 January	505,617,325	407,250,000

Add: Premium as a result of share conversion (Note 22.1)	42,173,355	116,566,922
Less: Direct expenses in issuing securities	(6,863,583)	(18,199,597)
Premium on share capital as at 31 December	540,927,097	505,617,325

#### 24. LEGAL RESERVE

The legal reserve is set aside under Section 116 of the Public Companies Act B.E. 2535 which requires a company to set aside as a legal reserve at least 5 percent of its net income after accumulated deficit brought forward (if any) until the reserve is not less than 10 per cent of the authorized capital. This reserve is not available for dividend distribution.

For the year ended 31 December 2011, the Company has set aside legal reserve from its net profit amounting Baht 27,192 (31 December 2012: Nil).

#### 25. BASIC EARNINGS PER SHARE

The calculations of basic earnings per share for the year ended 31 December 2012 and 2011 were based on the profit for the periods attributable to ordinary shareholders of the Company and the weighted average number of ordinary shares outstanding during the years as follows:-

	2012	2011
Profit attributable to ordinary shareholder of the Company (Basic)	171,317,252	29,286,658
Number of outstanding at the beginning of the period/year	398,233,078	300,000,000
Effect of ordinary share as a result of convertible debenture conversions	48,369,674	27,700,255
Weighted average number of ordinary share outstanding (Basic)	446,602,752	327,700,255
Basic earnings per share (Baht)	0.38	0.09

## 26. SEGMENT FINANCIAL INFORMATION

The Company's operations involve a single industry segment in manufacture and distribution of solar-cells and equipment which are used with solar - cells and are carried on in the single geographic area in Thailand. Accordingly, revenues, income and assets as reflected in these financial statements pertain to the industry segment and geographic area as mentioned above.

#### 27. CLASSIFICATION OF EXPENSES BY NATURE OF EXPENSES

	2012	2011
Management remunerations	23,622,291	19,364,842
Salary, wages and employee benefit expenses	42,520,864	28,645,372
Depreciation and amortisation expenses	12,009,291	11,130,681
Raw materials and supplies used	23,046,554	38,982,234
Changes in finished goods and work in process	30,333,514	(22,372,526)

#### 28. PROVIDENT FUND

The Company has established a contributory provident fund for its employees. Membership to the fund is on a voluntary basis. Contributions are made monthly by the employees and the Company at a rate 2% of employee's basic salaries. The provident fund is registered with the Ministry of Finance and is managed by a licensed Fund Manager.

For the year ended 31 December 2012 and 2011, the Company contributed Baht 0.68 million and 0.57 million, respectively, to the provident fund and charged directly to the statement of comprehensive income.

## 29. THE INVESTMENT PROMOTION RIGHTS AND PRIVILEGES

By virtue of the provisions of the Industrial Investment Promotion Act B.E. 2520, the Company has been granted privileges by the Board of Investment (BOI) relating to the assembly of solar-cell modules as per Certificate Number 1610(2)/2546 dated 6 November 2003 and the production of solar-cells as per Certificate Number 2181(9)/2548 dated 23 December 2005.

The privileges granted are as follows:-

Rights and Privileges	Certificate No.		
	1610(2)/2546	2181(9)/2548	
1. Issued date	6 November 2003	23 December 2005	
Exemption of import duty for machinery	Exemption from import duty for machinery as approved by the BOI	Exemption from import duty for machinery as approved by the BOI	
3. Exemption of import duty tax for raw materials and supplies for manufacture of export sales	5 years from first import date	5 years from first import date	
Exemption from corporate income tax	Exemption from corporate income tax not over 100% of investment (excluding land and working capital) for 8 years from the date of the export revenue first earned (27 January 2004), which will expire on 26 January 2012.	Exemption from corporate income tax for 8 years from the date of the export revenue first earned (The Company has not yet received revenue under this certification.)	

On 26 July 2005, the BOI approved an increase in the Company's production capacity of solar cells from 40,000 modules per year to 195,000 modules per year, under the Certificate No. 1610(2)/2546 which had been retrospectively effective to 2 September 2004 onward. In this regard, the Company must comply with certain conditions specified in the approval letter.

Subsequently, in February 2006, the Company was granted by the BOI an increase in the Company's production capacity of solar cells to be 269,568 modules per year and was granted the exemption of corporate income tax amount from not exceeding Baht 61,000,000 to not exceeding Baht 116,456,512. These rights and privileges had been retrospectively effective to 9 December 2005 onward.

The Company's shareholders will be exempted from income tax on dividend receivable during the period in which the Company is granted exemption from corporate income tax.

As a promoted company, the Company must comply with certain conditions and restrictions provided in the promotional certificates.

Revenue, cost and expenses are allocated to promoted business and non-promoted business as follows:

- a. Sales, direct costs and overhead expenses are presented under each business as incurred.
- b. Indirect costs and expenses are allocated to each business based on the proportion of revenues of each business.

## **REVENUE REPORTING OF A PROMOTED INDUSTRY**

	For the year ended 31 December 2012		
	Promoted	Non-promoted	Total
	Business	Business	Amount
	(Baht)	(Baht)	(Baht)
Revenues			· · · · · · · · · · · · · · · · · · ·
Revenues from local sales	240,000	1,104,791,319	1,105,031,319
Revenues from export sales	-	48,904,325	48,904,325
Total	240,000	1,153,695,644	1,153,935,644
	For the year ended 31 December 2011		
	Promoted	Non-promoted	Total
	Business	Business	Amount
	(Baht)	(Baht)	(Baht)
Revenues			
Revenues from local sales	56,437,322	1,202,790,148	1,259,227,470
Revenues from export sales	4,165,241	3,306,932	7,472,173
Total	60,602,563	1,206,097,080	1,266,699,643

#### 30. TRANSACTIONS WITH RELATED PARTIES

The Company has transactions with related parties. These parties are investee companies having mutual directors or companies which directors are major shareholders and/or have common directors. The financial statements reflect the effects of these transactions which are in the ordinary course of business with detail as follows:

Related parties, which have transactions with the Company, are as follows:-

Polated parties	Types of business	Relationship As at 31 December 2012	Relationship As at 31 December 2011
Related parties	Types of business		2011
Fac Rent Co., Ltd.	Warehouse rental	Co-director'	Co-director'
		spouse	spouse
Mr. Akradej Rojmeta	-	Director	Director
Mrs. Patama		Director	Director
Wonatovthona	<u>-</u>		

The Company has the pricing policies with its related parties' transactions as follows:

## Service fee and rental fee

Contracted prices and agreed prices determined on the terms and conditions in the normal course of business comparable to those of non-related parties.

30.1 Balances with the related party as at 31 December 2012 and 2011, is summarised as follows:
Transactions / Company names

Short-term loan form related party

Mr. Akradej Rojmeta

Short-term loan from related party is a promissory note which is repayable at call and interest free.

The movements for the years ended 31 December 2012 and 2011 are as follows:-

	2011	2010
Balance as at 1 January	-	4,500,000
Increase during the period	-	8,820,000
Decrease during the period	-	(13,320,000)

#### Balance as at 31 December

**30.2** Transactions with related companies for years ended 31 December 2012 and 2011 are mainly as follows:-

Transactions / Company names	2012	20101
Warehouse rental fee		
Fac Rent Co., Ltd.	556,920	556,920
Total	556,920	556,920

## 31. COMMITMENTS, LETTERS OF GUARANTEE AND CONTINGENCIES

- 31.1 As at 31 December 2012 and 2011, the Company has letters of guarantee issued by several local banks to guarantee the Company's performance to governmental and private organisations of amounting to Baht 279.71 million and Baht 146.82 million, respectively.
- **31.2** As at 31 December 2012 and 2011, the Company has unused letters of credit with several local banks as follows:

		(Unit : Unit)
Currency	2012	2011
- US Dollar	218,820	-
	4,064,570	-
- Euro	_	_

- Thai Baht

As at 31 December 2012 and 2011, the abovementioned letters of guarantee and letters of credit are secured by pledging of the Company's fixed deposits (Note 13).

- 31.3 As at 31 December 2011, the Company has a long-term loan agreement of Baht 500 million (31 December 2012: Nil) with a local bank to finance the purchase of machinery and equipment for the construction of solar-cell factory. This loan is collateralised by the mortgage of the Company's certain land, future factory, machinery, and equipment to be acquired in the future (Note 14). In addition, the Company must comply with the conditions specified in the agreement such as maintaining the fixed deposit amount and certain financial ratios.

  During June 2012, the Company terminated this long-term loan and revoked the mortgages.
- 31.4 As at 31 December 2012 and 2011, the Company has commitment under plant design and supply of machinery and equipment amounting Euro 3.79 million (Baht 154.86 million) and Euro 5.79 million (Baht 236.58 million), respectively (Note 11).
- 31.5 As at 31 December 2011, the Company has commitment under long term wafer supply contracts totalling Euro 9.84 million (31 December 2012: Nil) (Note 16).
- 31.6 As at 31 December 2012 and 2011, the Company has a construction agreement with a local consortium to construct solar-cell factory amounting to Baht 144,72 million in which the Company had paid partial payment amounting to Baht 129.93 million and presented under asset under construction (Note 14). Therefore, the Company has the outstanding commitment of Baht 14.79 million.

## 32. DISCLOSURE OF INFORMATION ON FINANCIAL INSTRUMENTS

**32.1** Financial risk management policies

The Company is exposed to normal business risks from changes in market interest rates and currency exchange rates and from non-performance of contractual obligations by counterparties. The Company does not issue derivative financial instruments for speculative or trading purposes.

#### 32.2 Credit risk

The Company is exposed to credit risk primarily with respect to trade accounts receivable. However, due to its conservative policy on granting credit to customers, and only dealing with creditworthy counterparties which should prove to be collectible, the Company does not anticipate material losses from its debt collection in excess of the allowance for doubtful accounts already set aside in the accounts. The carrying amount of the assets recorded in the statement of financial position, net of allowance for doubtful accounts, represents the Company's maximum exposure to credit risk.

However, the Company has a risk for its few major trade receivables; therefore the result of the Company's operation depends on the collectability of those receivables.

# 32.3 Foreign exchange risk

As at 31 December 2012 and 2011, the Company has assets and liabilities dominated in foreign currencies not covered by any hedging against exchange risk as follows:

	2012	(Unit : Unit) 2011
Assets		
Trade accounts receivable		
- USD	51,341	30,045
- Euro	112,335	140,283
Liabilities		
Trust receipts and promissory notes		
- USD	_	268,744
- Euro	-	524,739
- JPY	_	=
Trade accounts payable		
- USD	183,654	1,029,689
- Euro	1,164,649	7,875
- JPY	-	603,300

As at 31 December 2012 the Company has outstanding buying forward contract amounting of 911,013 Euro of which the delivery is to made within March 2013 (31 December 2012; Nil).

# **32.4** Interest rate risk

Interest rate risk is the risk that future movements in market interest rates will affect the results of the Company's operations and its cash flows. The Company is primarily exposed to interest rate risk from floating interest rates of bank overdrafts and short-term loans from financial institutions.

# 32.5 Liquidity risk

The Company's monitoring of its liquidity risk and maintaining a level of cash and cash equivalents deemed adequate by management to finance the Company's operations and to mitigate the effects of fluctuations in cash flows.

#### **32.6** Fair value of financial instruments

The following methods and assumptions are used by the Company in estimating fair value of financial instruments:

The fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction. In determining the fair value of its financial assets and liabilities, the Company takes into account its current circumstances and the costs that would be incurred to exchange or settle the underlying financial instrument.

The majority of the financial assets and liabilities are short – term and the interest rates of the loans are close to market rates. Therefore, the Company's management believes that the fair value of the Company financial assets and financial liabilities do not materially differ from their carrying values.

# 33. CAPITAL MANAGEMENT

The objective of the financial management of the Company is to maintain the continuity of the operation capability and capital structure to be appropriated and going concern.

The Company's financial positions as at 31 December 2012 and 2011 have debt to equity ratio at 0.95:1 and 0.90:1 respectively.

#### 34. RECLASSIFICATION

Certain amounts in the financial statements for the year 2011 have been reclassified to conform to the year 2012 classification but with no effect to previously reported net profit or statement of comprehensive income.

The significant reclassifications are as follows:

-	Before		After
	reclassification	Reclassification	reclassification
Statements of financial position as at 31 December 2011			
Trade receivable - net	271,063,311	(271,063,311)	-
Trade and other receivables - net	-	283,275,817	283,275,817
Other current assets	31,713,411	(12,212,506)	19,500,905
Trade payable	149,079,410	(149,09,410)	-
Trade and other payables	_	167,627,769	167,627,769
Other current liabilities	35,770,595	(18,548,359)	17,222,236
Statements of cash flows for the year ended 31 December 2011			
Trade receivable	(132,778,307)	132,778,307	-
Trade and other receivables - net	-	(143,569,587)	(143,569,587)
Other current assets	4,355,356	10,791,280	15,146,636
Trade payable	(129,598,142)	129,598,142	_
Trade and other payables	-	(111,049,783)	(111,049,783)
Other current liabilities	9,284,216	(18.548.359)	(9,264,143)

#### 35. APPROVAL OF THE FINANCIAL STATEMENTS

These financial statements have been approved for issuance by the Board of Directors of the Company on 28 February 2013.