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Brighten the Sustainable Future of Photovoltaic Energy Solution with First Solar

Prepared for First Solar
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Evaluation of First Solar's Current Operations

Identification of Three Future External Trends

Market Assessment and Recommendation on Three Potential Country Targets

Implementation Plan and Financials




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First Solar Differentiates itself by Extending into Systems Business, Maintaining Strong Financials and Shifting into Sustainable Market

Turnkey Solution Model

Strong Financials

- Maintain healthy balance sheet
- Strongest net cash position in the industry

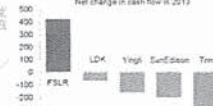

Sustainable Market Shift

- Long-Term Strategic Plan outlines the target shift to sustainable market

Net change in cash flow in 2013

PV attractiveness

Source: Case materials, company website, EPIA





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Soaring Demand in Photovoltaic (PV) Module Contributed by America and Emerging Countries

Constant Growth in PV Module and System can be attributed to:

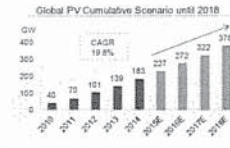
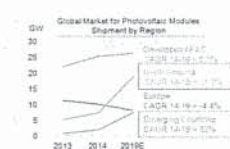
- Rising demand for renewable energy
- Reduction in PV cost
- Country and state policy incentives

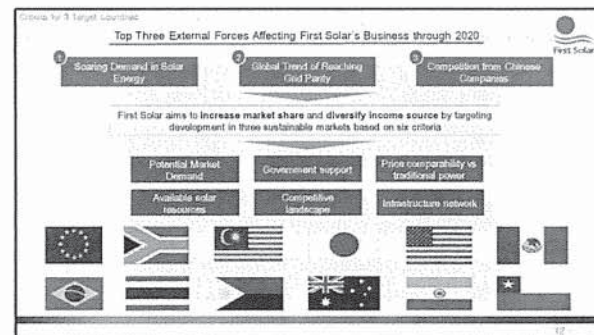
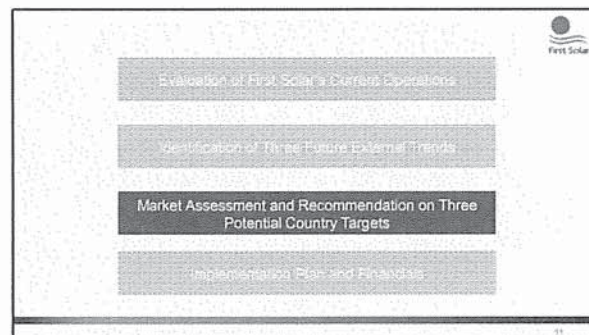
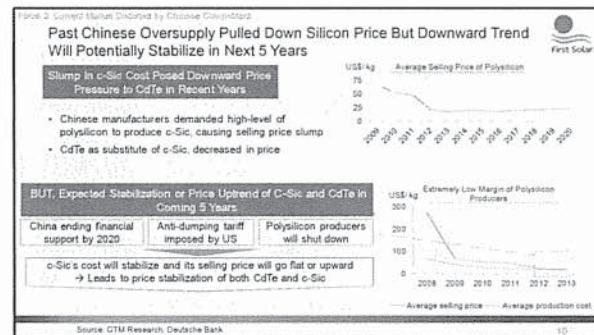
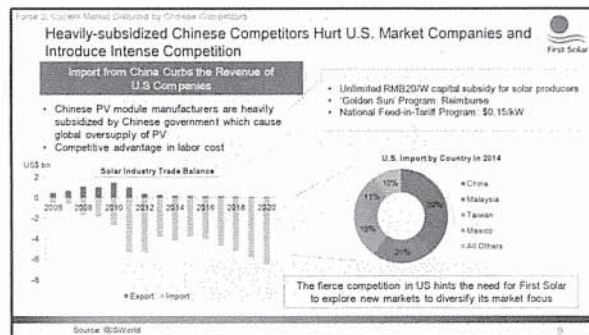
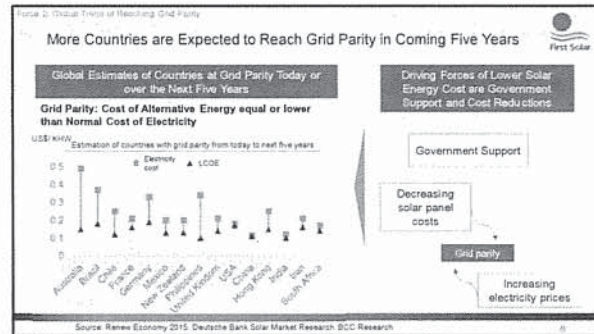
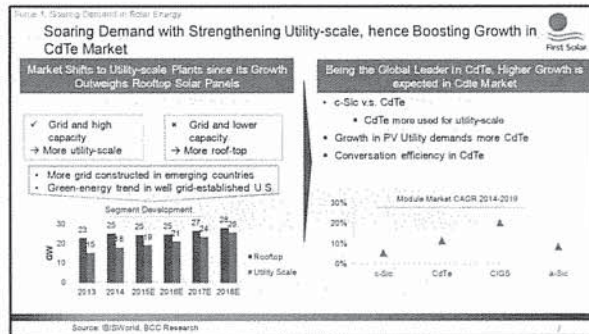
Global PV Cumulative Scenario until 2018

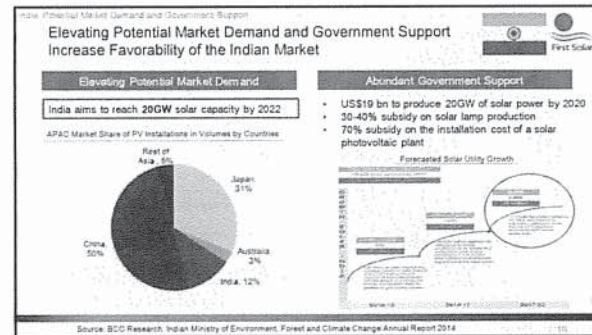
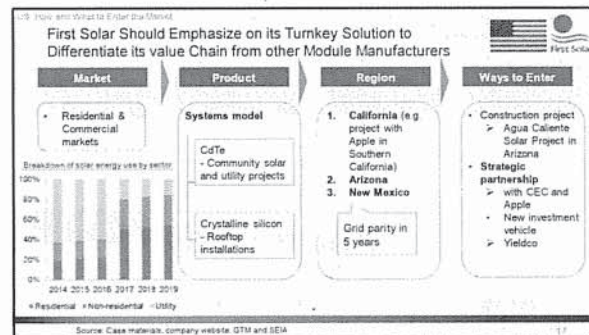
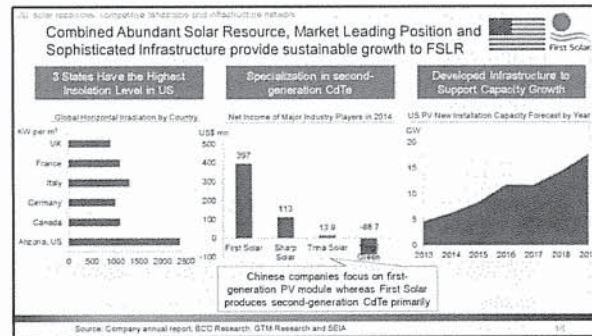
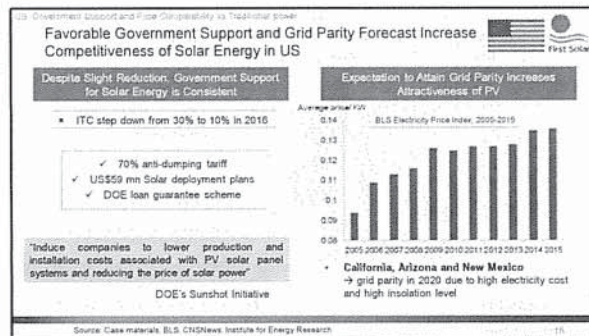
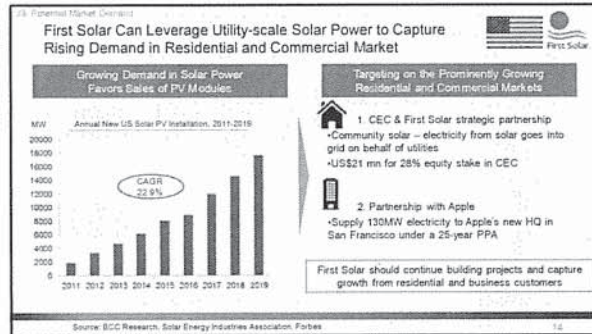
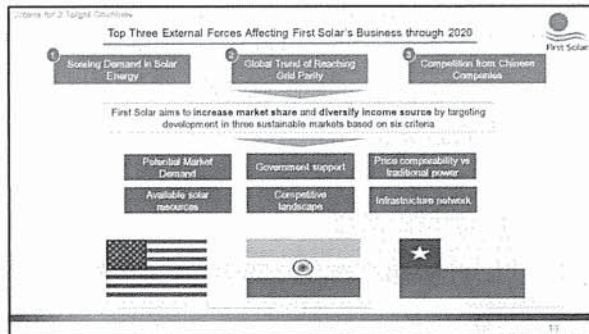
Global Market for Photovoltaic Modules Shipment by Region

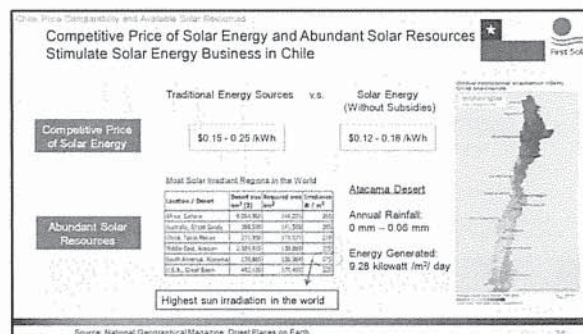
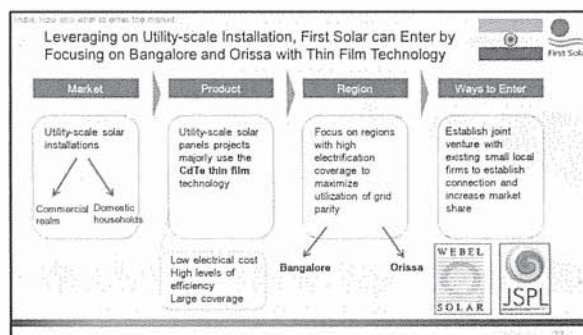
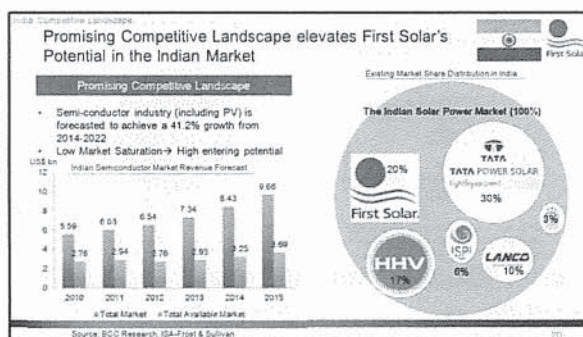
PV Growth shift to North America and Emerging Countries

Source: IHS Global VLS Research







Leading Position and Comprehensive Infrastructure Network Expand Potential Business of First Solar in Chile

Acquisition and the Underlying Power Plant Secure FSLR's Leading Market Position

Comprehensive Infrastructure Network and Available Mining Resources

- 97% electricity coverage in total, 90% in rural areas
- Rich mining resources
- Gold, Silver & Copper Deposits in North Central Chile

SUNPOWER

SunEdison

• Acquisition of Solar Chile expands the market share of First Solar in Chile

• The ongoing construction of the largest solar power plant in Latin America will produce electricity for over 173,962 families

Targeting Mining Companies and Households, FSLR can Enter Chile with CdTe and Gradually Develop into Systems Business

Market: Utility-scale solar installations (Mines in Northern Chile, Domestic households)

Product: Utility-scale solar panels projects majorly using the CdTe thin film technology

Region: Focus on Northern Chile & Regions near Atacama Desert

Ways to Enter: Acquisition of local solar energy firms to establish connections

Long term: Further develop systems business

1. Low costs
2. Increasing efficiency

First Solar

Despite the High Potential, Potential Risks are Involved But can be Tackled by More Gov Support, Company Strength and Possible Acquisition

Potential Risks

- Possible cut of government support
- DoE loans maybe cut after the bankruptcy of Solyndra
- Corruption
- Limited Electrification Coverage
- High cost of borrowing
- Transmission constraints

But they can be managed by...

- New support programs and proposed permanent extension of tax credits
- Increased electrification coverage
- Stricter domestic regulations
- Strong financial position
- Grid integration in progress

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Implementation Plan and Financials

5 Year Implementation Plan for First Solar (2015-2020)

Detailed Implementation Actions

2015	2016	2017	2018	2019	2020
Construction	Provides O&M services	Solar Project invested by Apple in California	Generate Electricity in residential market	Develop Community Solar in cooperation with CEC	
Construction	Provides O&M services	Solar Project in Telangana and Andhra Pradesh			
Construction	Provides O&M services	Operate fully			
Own construction of PV power plant					

Source: International Energy Agency, Navigant Research

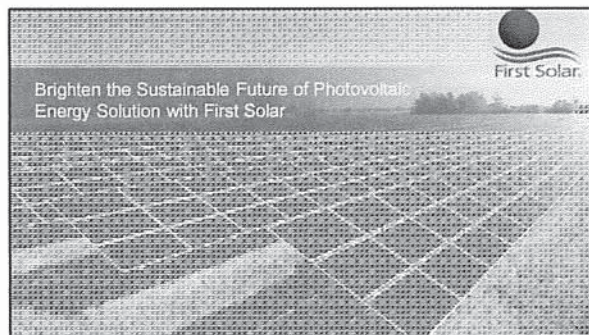
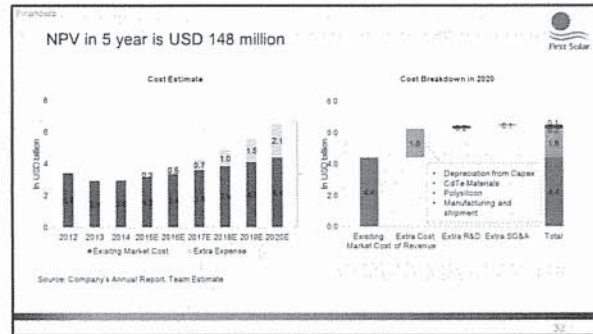
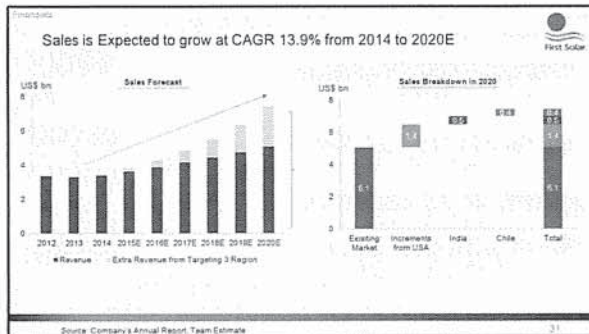
Strong Financial Health Offers Flexible Financing to First Solar

Net Debt/Equity: Attractive Credit Profile to Banks

Abundant Source of Financing

- Idle Cash**
 - Operating Expenses and Capex are less than the amount of cash First Solar holds
- Investment from Partnership**
 - Apple invest \$848 million in First Solar's California Flats Solar Project
- Debt Project Financing**
 - U.S. Government DoE Loan
 - Bank Loan

Source: Company's Annual Report

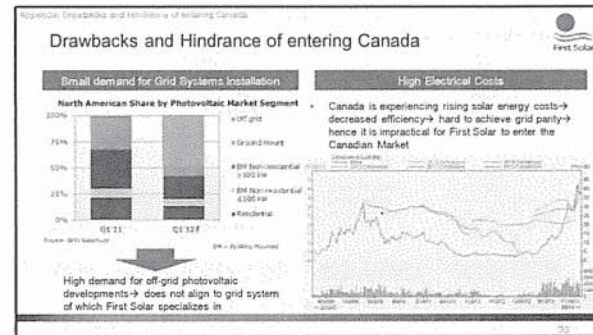


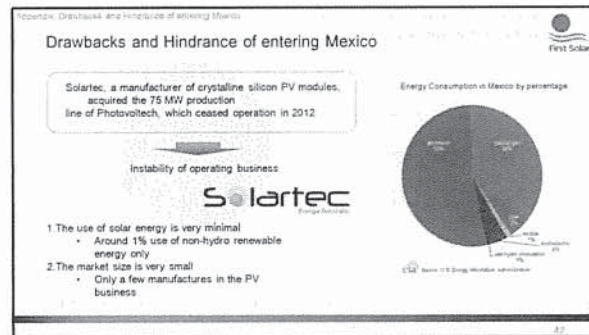
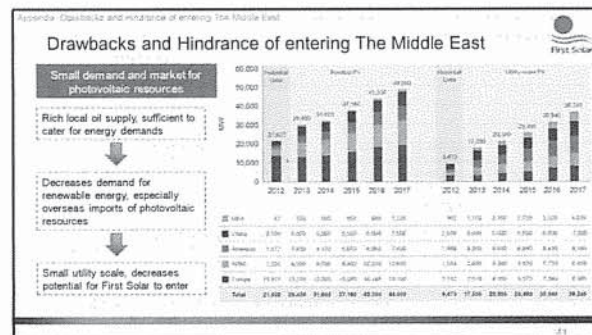
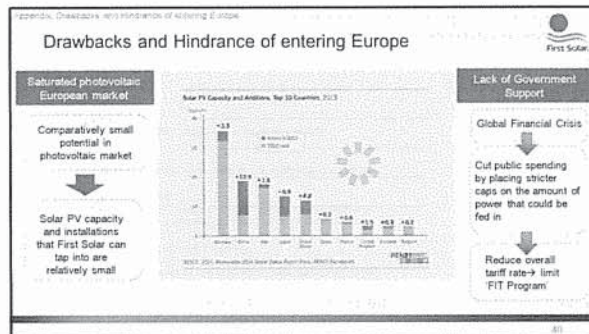
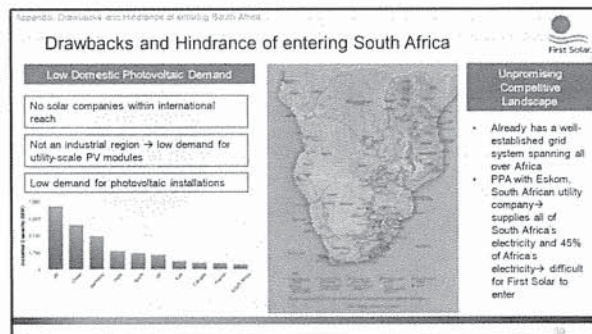
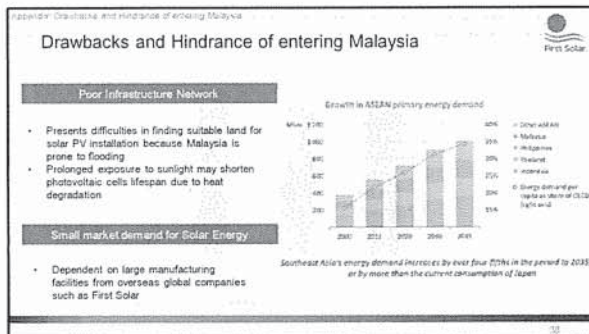
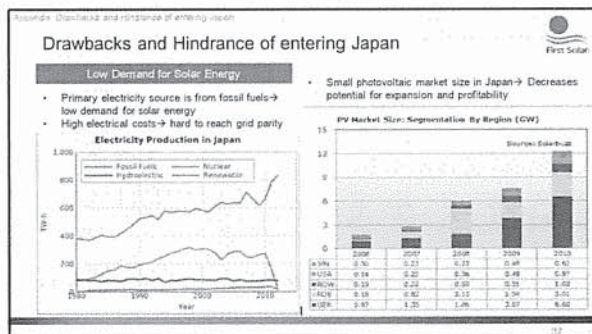
Appendix

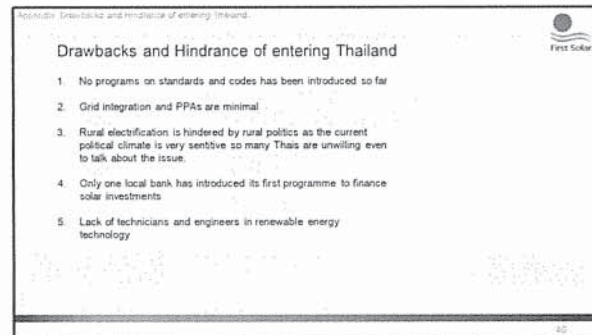
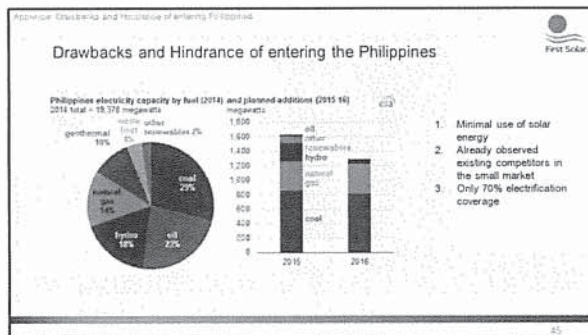
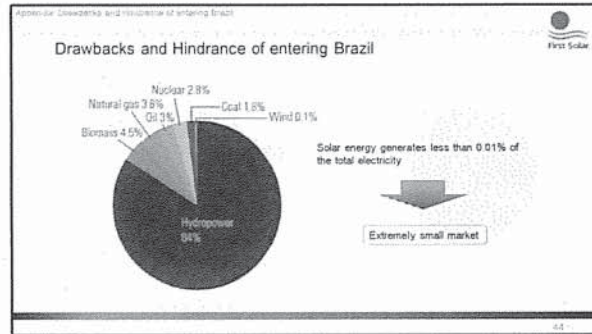
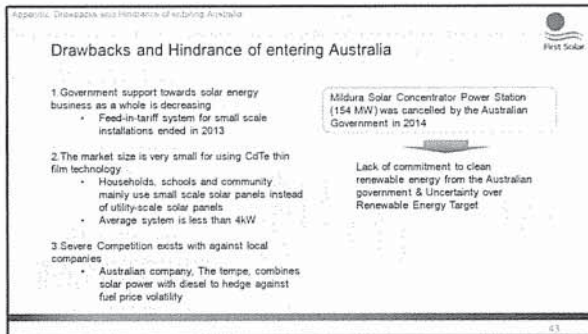
- Drawbacks and hindrance of market entry
 - Global comparison
 - Canada
 - Japan
 - Malaysia
 - South Africa
 - Europe
 - Middle East
 - Mexico
 - Australia
 - Brazil
 - Philippines
 - Thailand
- First Solar
 - List of customers
 - Partnership with CEC
 - Financials
 - Income Statement forecast
 - Revenue breakdown by region
 - Assumptions: Market share and Countries' annual installations
 - Assumptions: First Solar's annual installed capacity
 - Renewable energy
 - Country targets on using renewable energy
 - Public support for solar energy
 - Rooftop vs utility-scale development until 2018

Country	India	Japan	Thailand	The U.S.	The Philippines	South Africa	Malaysia	Middle East	Europe	Brazil	Chile
PV Market Size	Large	Small	Small	Large	Small	Small	Average	Small	Average	Small	Large
Electrification Rate	75.0%	100.0%	99.0%	100.0%	70.0%	85.0%	100.0%	92.0%	98.0%	100.0%	97.0%
Solar Energy Demand	High	Moderate	Low	High	Low	Low	Moderate	Low	Moderate	Low	High
Available Solar Resources	Plenty	Fair	Fair	Plenty	Fair	Plenty	Poor	Poor	Plenty	Fair	Plenty
Government Support	Plenty	Plenty	Poor	Plenty	Poor	Poor	Fair	Poor	Poor	Poor	Fair
Disparity between solar and conventional energy costs	Low	High	High	Fair	High	High	High	High	Fair	Fair	High
Competitive landscape (Low Saturation-LS; Saturated-S)	LS	S	LS	S	LS	LS	LS	S	S	LS	LS
Enter/Not enter	✓	✗	✗	✓	✗	✗	✗	✗	✗	✗	✓

Source: The World Energy Outlook Database, International Energy Agency





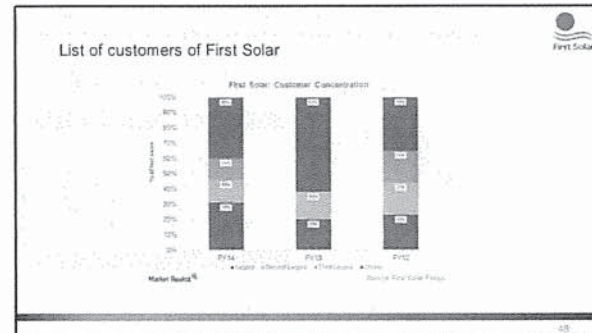


Income Statement Forecast

FY ends in December, USD in millions

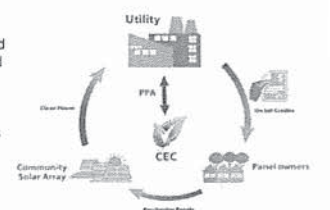
	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
Revenue	3309	3302	3816	4255	4815	5500	6340	7419
Cost of revenue	2446	2565	2977	3310	3684	4160	4704	5501
Gross profit	863	827	964	1074	1210	1389	1604	1874
Research and development	134	144	155	173	190	224	258	302
Sales, General and administrative	273	250	311	347	303	449	518	665
Restructuring, merger and acquisition								
Other operating expenses	87							
Total operating expenses	494	404	487	520	589	672	776	907
Operating income	369	424	477	554	627	717	827	967
Interest Expense	2	2	2	2	4	4	4	4
Other income (expense)	12	10	11	11	11	11	11	11
Income before taxes	379	432	500	563	634	724	834	974
Provision for income taxes	25	30	35	30	44	50	58	68
Other income								
Net Income	354	397	471	524	590	673	776	900

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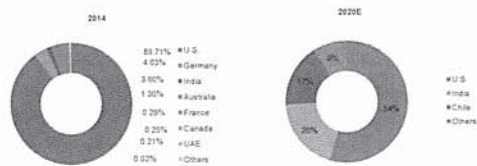


Company Partnership with CEC for Community Solar Programs in Residential and Commercial Markets

- Distributed generation in the form of community solar expand the addressable market beyond the traditional residential or commercial sectors
- Vast majority of projects will utilize FSLR's thin-film modules



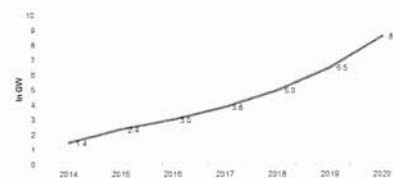
Revenue Breakdown by Region



Forecast Assumption: Countries Annual PV Installation and First Solar Market Share



Forecast Assumption: First Solar Annual Installed Capacity



Countries' pledges on the use of renewable energy



- U.S.A Renewable Energy Target is to reach 20% by 2020
- California Governor Jerry proposed a new clean energy target for the state: 50% renewable energy by 2030



- Indian Renewable Energy Ministry plans to quadruple its power generation capacity from renewable sources to 72,400 MW by 2022
- 20,000MW solar capacity is expected to be achieved by 2022



- The Chilean Senate voted to revise the renewable energy target to reach 20% by 2020
- The Chilean Environmental Evaluation Service has already approved 4 GW of solar powered projects

Global public support for energy sources

Please indicate whether you strongly support, somewhat support, somewhat oppose, or strongly oppose each way of producing energy

