

Green Source & LSG Group presents Successful photovoltaic projects in Romania ... "against all odds"

Bucharest, November 2013



//Successful photovoltaic projects in Romania – against all odds

Overview

- About Us
 - Green Source GmbH
 - LSG Group GmbH
- Our Story
- Summary





Our Story

Summary

//Successful photovoltaic projects in Romania – against all odds

Who we are



group

- **Project developer** (Local Romanian and international)
- EPC contractor
- Fundraiser
- Investor
- Operator

Track record in Romania:

Project 45 MW \rightarrow in operation // **Project 20 MW** \rightarrow in operation // **Project 50 MW** \rightarrow under construction





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Project Phases

	Financing Phase				
Preparation Phase	Development Phase		Construction Phase	Operation Phase	
1.Sourcing	2.Permits	3.Contracts	4.Construction	5.Operation	
 Country Local partner Site/Location Securing land 	 PUZ Changing land use Audits & surveys Detailed design Construction permit Setting up authorisation 	 Investment agreement EPC Insurance O&M Financing 	 Technical construction Testing Grid connection TSO- certificate License Accreditation 	 Operating plant Maintenance Dispatcher GC-sales Power-sales Admin. works 	
12-18 M	Vionths	4-6 Months	4-9 Months	15 Years	





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Parties involved

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Authorities (City hall, Environmental, ANRE, ...)

Grid operators (Transelectrica, Enel, CEZ, ...)

Power trader & GC trader

Suppliers

(Modules, Inverter, etc.)



L S G group **Equity investors**

Equity investors' advisors (legal, technical, insurance, etc.)

Lenders

Lenders' advisors (legal, technical, insurance, etc.)

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Business Formation





• Law 220 was published but not applicable

• Banks and investors had a wait-and-see attitude



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Event-Timeline





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First Project developed

45MW project

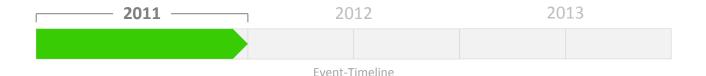
Status: First part of project development is completed

13.07.2011 EU approved law 220

- Investors show interest
- Start of all legal DDs

19.10.2011 law 220 became fully valid and applicable

- Interest by investors increased
- Banks are prepared to finance projects (Premise: long-term GCPAs!)



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Rumors: GCs cutback

Rumors about cutback of GCs by the end of 2012

- Contract negotiations with investors, banks, GC- and power buyers
- The "overcompensation"-problem
- Pressure to finish the projects before 31.12.2012
- Problems with suppliers' delivery times



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Energy Act and Law 134

19.07.2012: PPAs are forbidden 23.07.2012: Law 134 → no GC-reduction before 01.01.2014

- GC-buyers withdraw → GCPAs without PPA impossible to close
- Banks and investors step back

Bulgarian government: Retroactive network access fee up to 39%

• Shock situation: investors equate Bulgaria with Romania







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EGO 57/2013

Solution for PPA prohibition : Service Agreement

• Banks and investors continue with financing

01.07.2013: EGO 57/2013 in force

- Suspension of 2 green certificates until 2017
- Limitation of accreditation in the future
- Reduction of GCs possible at any time
- Trading of GCs now only via OPCOM







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EU Anti-dumping duties

04.06.2013: EU decides on provisional anti-dumping duties for Chinese solar modules

- No offers from Chinese module suppliers due to unclear situation
- Modules from European manufacturers too expensive
- August China and EU agreed on minimum prices and quotes

2011	2012	2013
	Event-Timeline	





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We hate "Wednesday"...

Wednesday

... in Romania:

The Romanian government has its regular cabinet meeting

ANRE has its weekly approval committee for authorisations, licenses, accreditations, etc.

...but we believe in Romania. Thank you!



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Picture of the 110/20kV substation at the 45MW project