



# Axis Renováveis

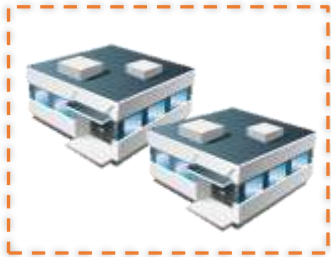
May 2017

# Our product

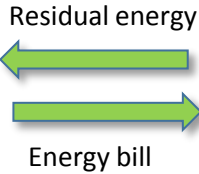
Our main value generation proposition is to provide predictable energy rates with low costs to our customers, with no upfront payment and guaranteed energy generation.



► Customers



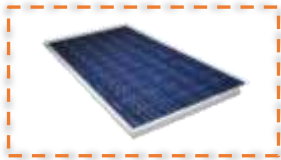
► Utilities



► Investors

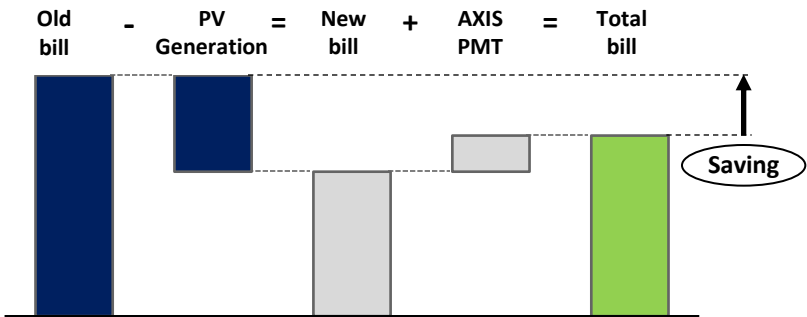


- PV system installation
- 10-15 years O&M contract
- Energy generation warranty



► Suppliers

► This is how our product will help our customer save in his energy bills:



► We will charge our customer a price per kWh lower than the utility's price per kWh.

# Raia Drogasil and Localiza: phase 1

*Some examples of our experience with PV DG.*

- ▶ **Location: MG**
- ▶ **Installed capacity: 222 kWp**
- ▶ **Number of locations: 12**
- ▶ **Type: on-site generation**
- ▶ **Term: 12+ years**
- ▶ **Status: in operation**



• Raia Drogasil store #1: Prado



• Localiza store #1: Cristiano Machado



• Raia Drogasil store #2: Segismundo



• Raia Drogasil store #3: São Bento



• Raia Drogasil store #4: Pampulha



• Raia Drogasil store #4: Buritis



• Raia Drogasil store #5: Gutierrez

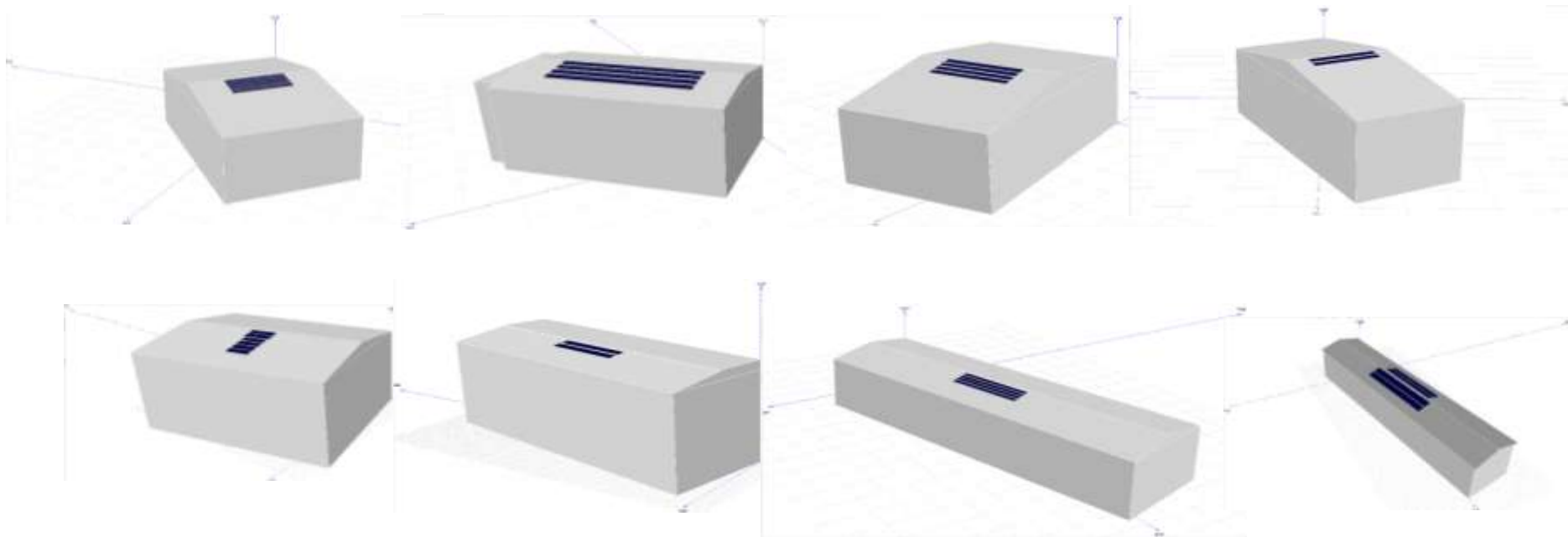
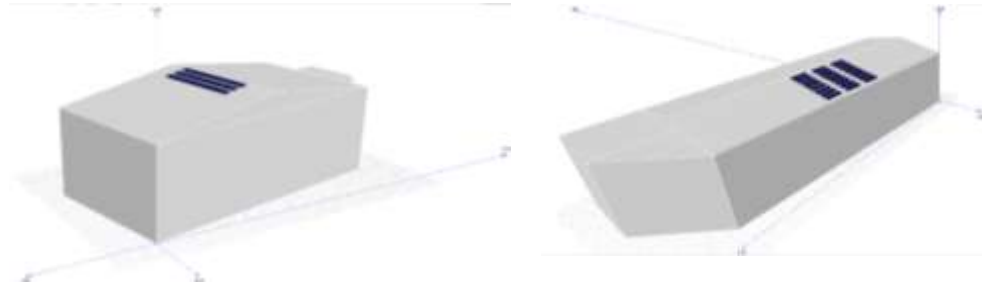


• Detail on the asbestos rooftop fixation solution, developed by Axis

# Backlog: 458 kWp project

## Backlog

- ▶ Location: 12 states (pending)
- ▶ Installed capacity: 458 kWp
- ▶ Number of locations: 15
- ▶ Type: on-site generation
- ▶ Term: 12 years
- ▶ Status: signed, on technical visits

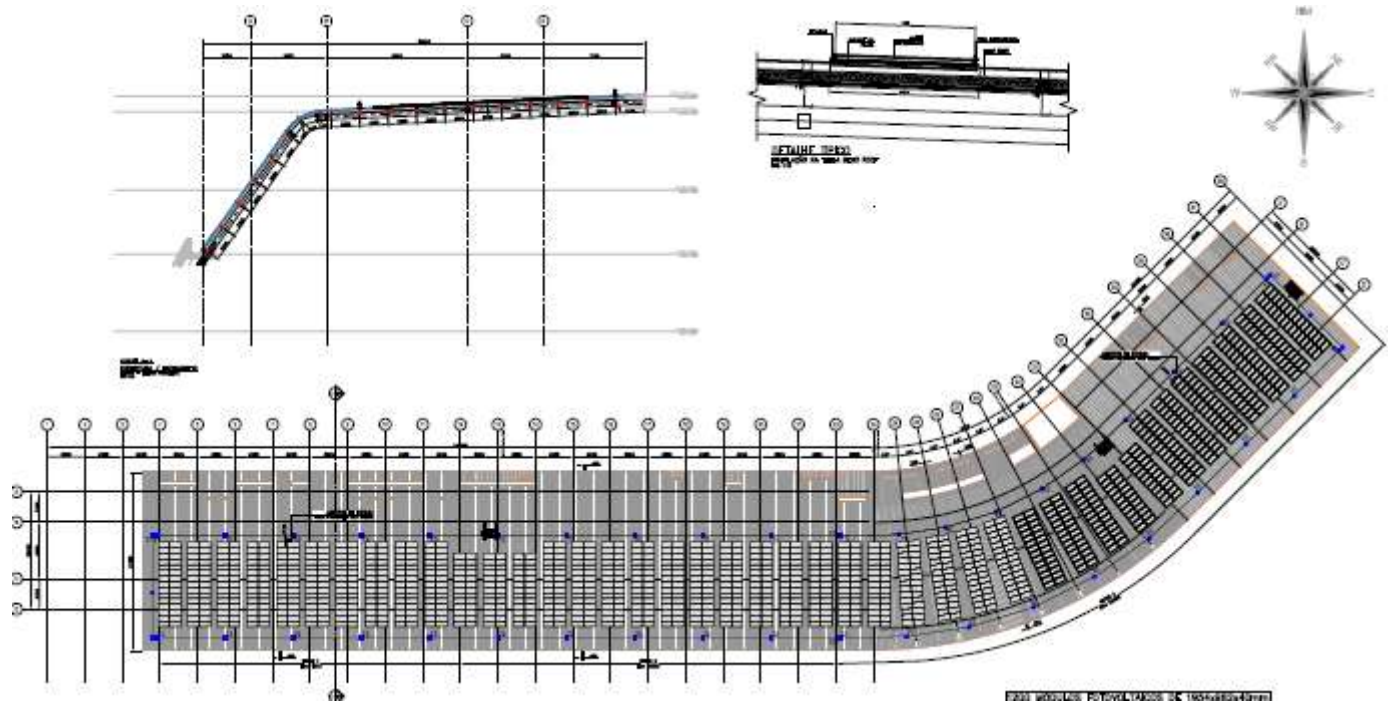


## 1. Our market

# Backlog: 384 kWp RJ project

## Backlog

- Locations: RJ
- Installed capacity: 384 kWp
- Number of locations: 1
- Type: on-site generation
- Term: 10 years
- Status: signed

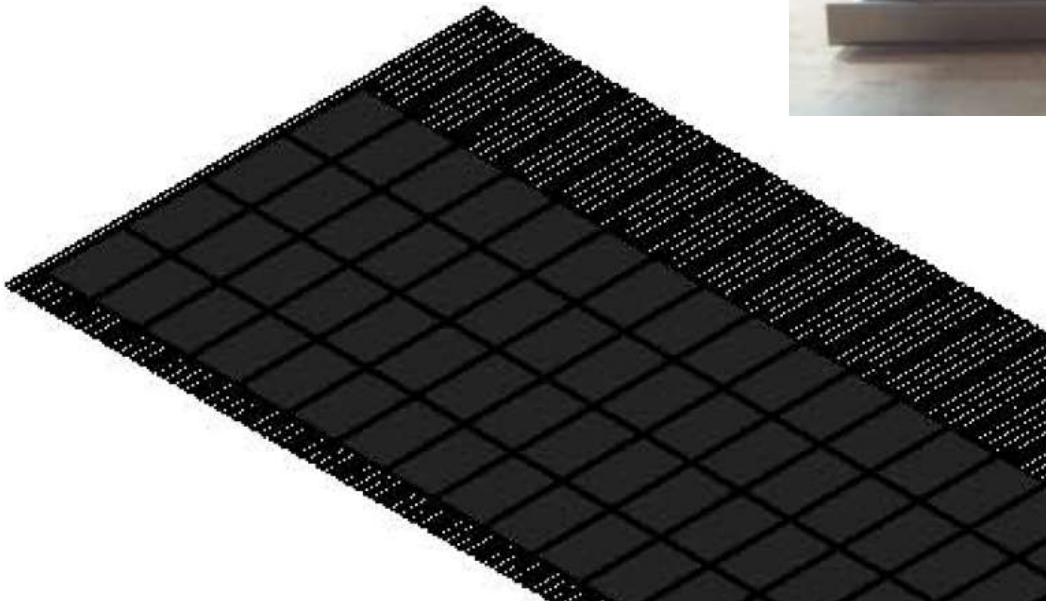


## 1. Our market

# Backlog: 75 kWp MG Carport project

## Backlog

- ▶ Location: MG
- ▶ Installed capacity: 75 kWp
- ▶ Number of locations: 1
- ▶ Type: on-site generation
- ▶ Term: 15 years
- ▶ Status: signed

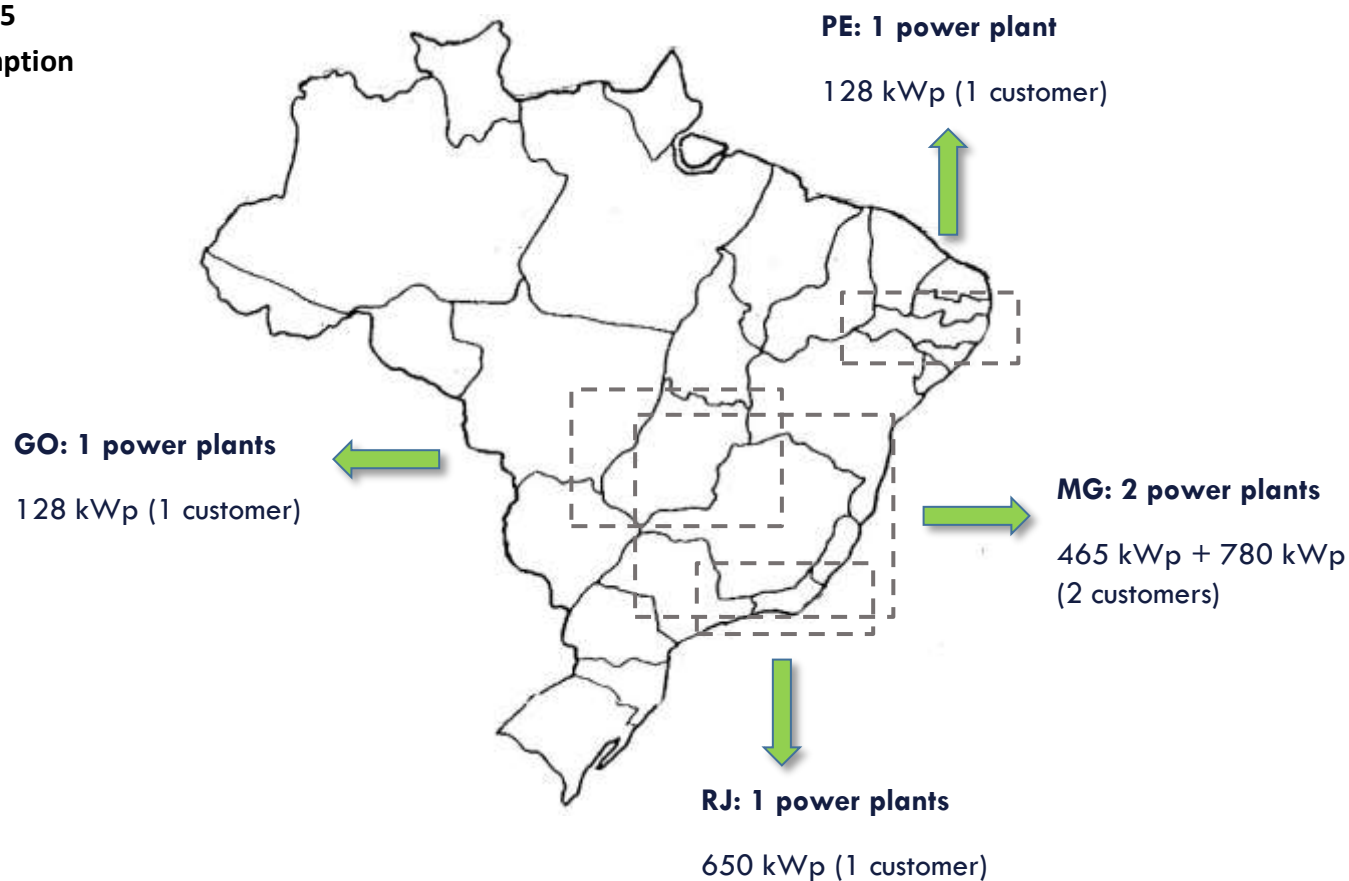


## 1. Our market

# Backlog: remote generation projects

*Net metering credits ownership can now be transferred to be used in other locations and by different consumers.*

- **Locations:** MG, GO, RJ and PE
- **Installed capacity:** 2.100 kWp
- **Number of power plants:** 5
- **Type:** remote self-consumption
- **Term:** 20 years
- **Status:** signed



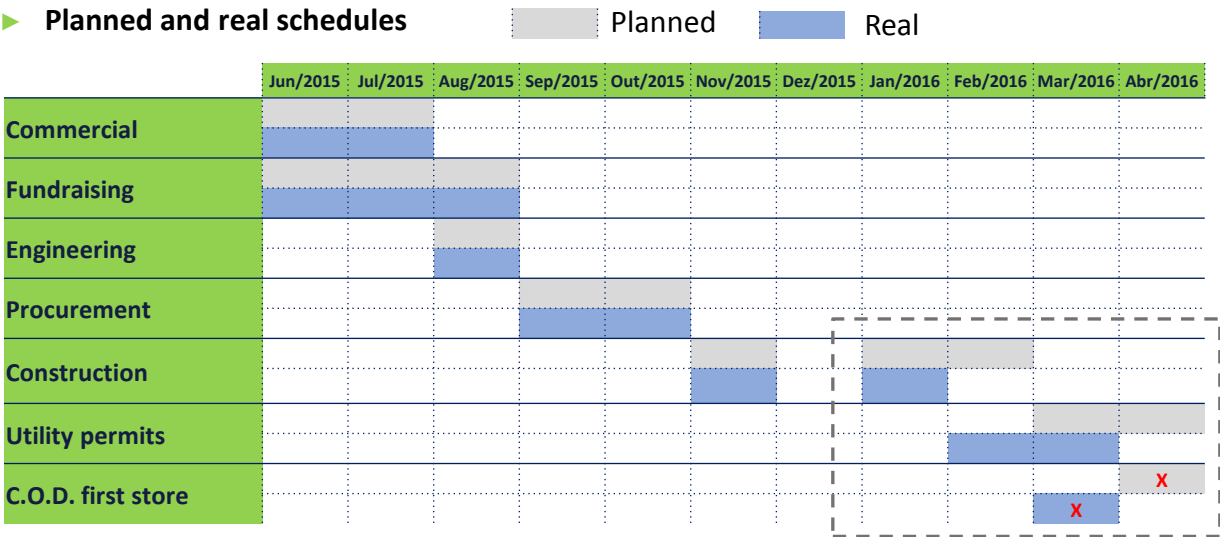


# Raia Drogasil phase 1: performance



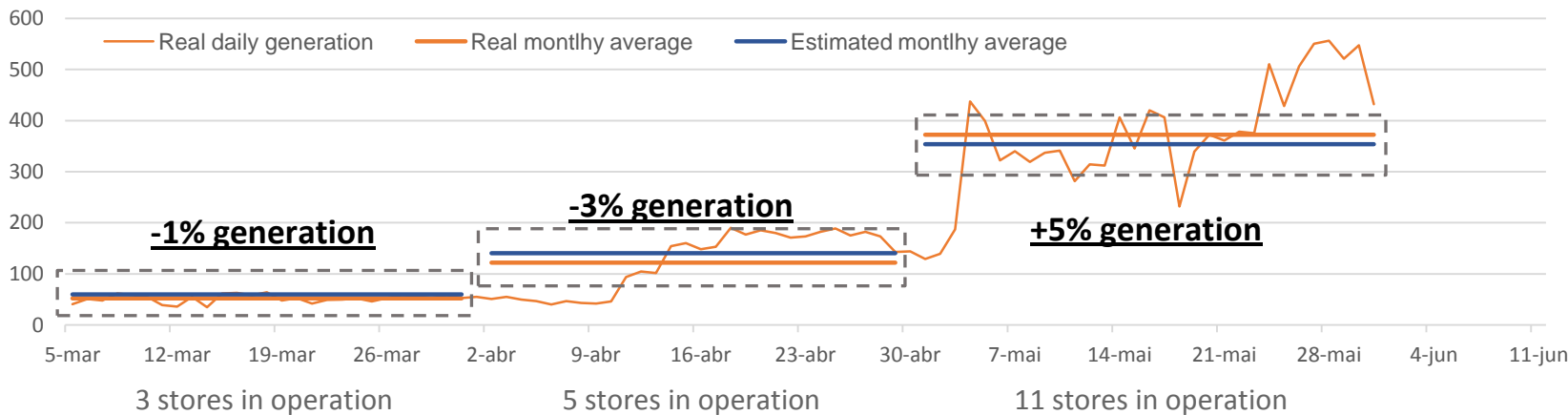
Our projects have outperformed our estimatives in terms of energy generation and schedule. All projects were concluded on budget.

### Planned and real schedules



- Main challenges:
- Interconnection;
  - Lack of customer documentation on facilities;

### Estimated versus real monthly energy generation





# Raia Drogasil phase 1: O&M



The first preventive O&M 6 months after installation gave us the opportunity to improve on our operations strategy

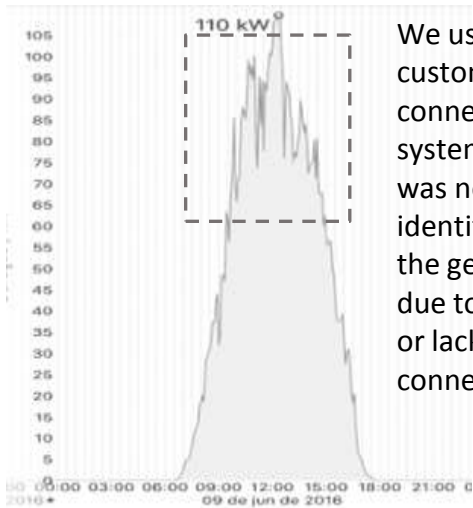
► **Module cleaning**



- +7% overall energy production

► **Billing**

► **Internet link**



We used our customer's internet connection to monitor system performance. It was not possible to identify if the noise on the generation was due to system failure or lack of internet connection.



Solution

Conta	Plano	Saldo	Conexão	Ações
4758	100.00 MBs	81.48 MBs	✓	✓
4758	2.00 MBs	-25.20 MBs	✓	✓
4758	2.00 MBs	-16.46 MBs	✓	✓
4758	2.00 MBs	-28.07 MBs	✓	✓
4758	50.00 MBs	22.80 MBs	✓	✓
4759	40.00 MBs	32.11 MBs	✓	✓
4758	2.00 MBs	-25.56 MBs	✓	✓
4758	2.00 MBs	-5.41 MBs	✓	✓
4759	40.00 MBs	14.53 MBs	✓	✓
4758	100.00 MBs	42.15 MBs	✓	✓
4758	2.00 MBs	-431.42 MBs	✗	✗
4758	100.00 MBs	-3031.98 MBs	✗	✗

Total de SIM Cards: 12

- We contracted our own SIM cards to monitor internet availability and be able to better manage our maintenance

# Raia Drogasil phase 1: O&M

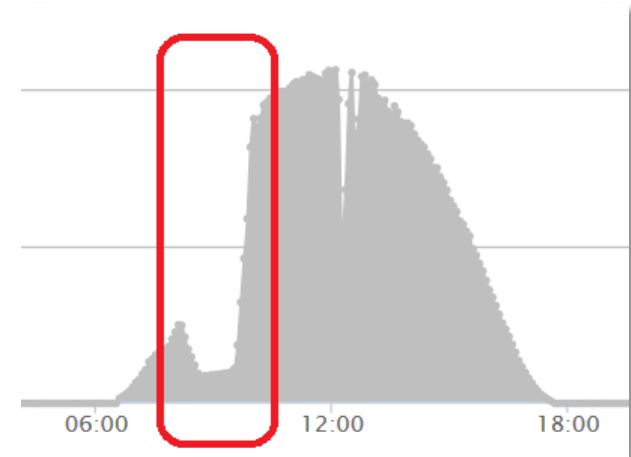
*The first preventive O&M 6 months after installation gave us the opportunity to improve on our operations strategy*

## ► Building shading

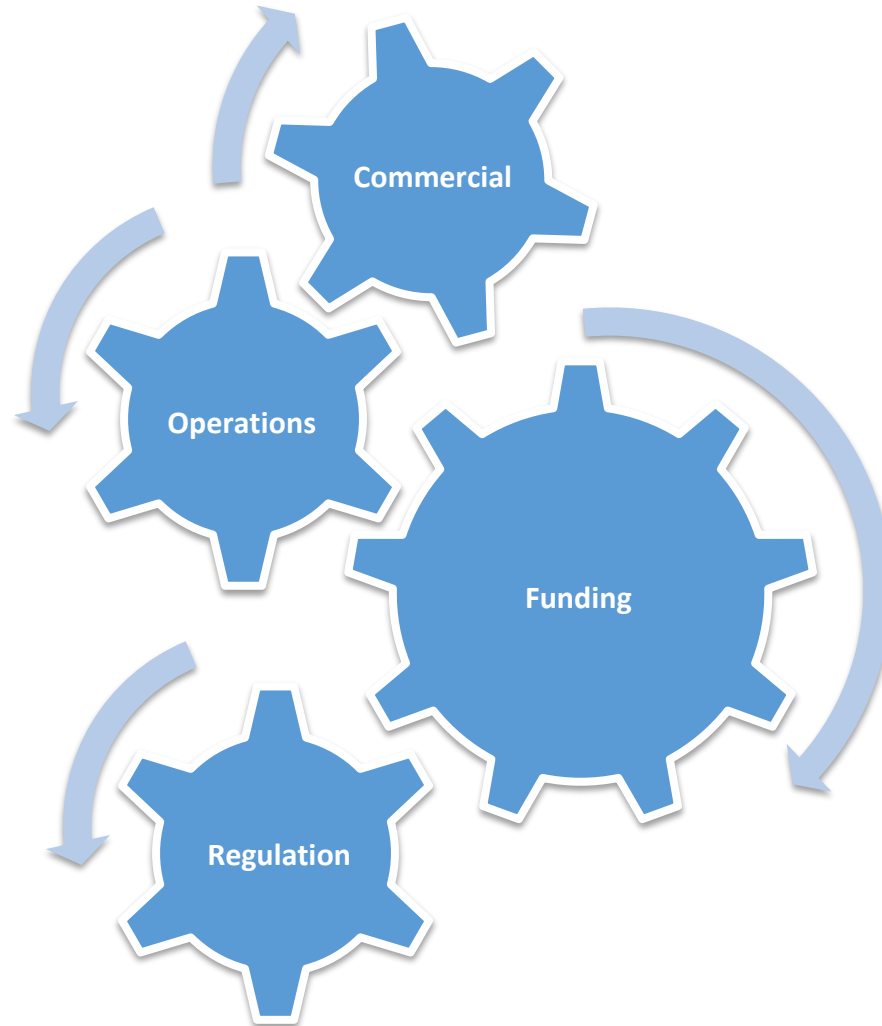
August/2015



July/2016



**-8% AEP**



## ► Commercial

- What is the right product for residential customers? How to deal with “solar curious” customers?

## ► Funding

- How much debt should a company take? How can a development company remain strong in a capital intensive market? How to take advantage of the upsides of a solar PV project in the long term?

## ► Regulation and taxes

- How to positively influence the regulatory environment? How to deal with the uncertainties on the tax environment?

# Thank you!

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