

# SunCommunity

*Solar energy made easy - for all*

*January 2017*



**SUN**  
Community

# The absurdity: Only 150 households in Chile have solar panels, despite solar energy being the cheapest source of energy in the country

## Fact 1

Solar energy is by far the cheapest energy source in Chile



## Fact 2

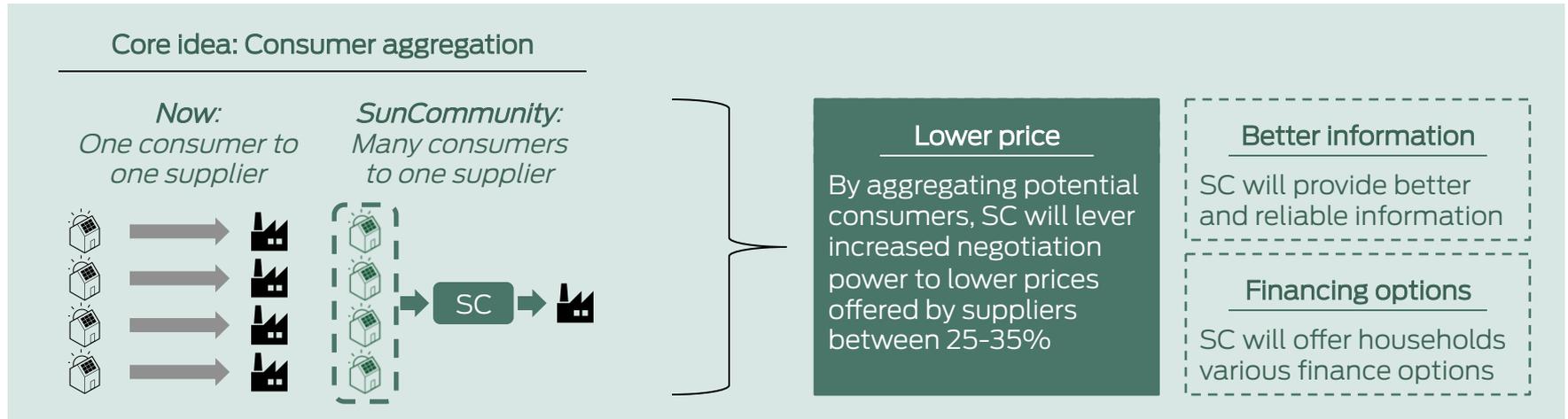
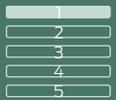
Just 150 households in Chile are powered by the sun

### Why is this?

	High price point
	Poor information
	Lack of financing options

- As most solar panels to individual households are being sold in small batches, the price of each panel is higher than it needs to be
- Price per watt of solar panels exceeds the price levels in among others USA, Japan, France, Australia, Germany etc.
- Information provided by current suppliers is poor and unreliable
- There is a lack of information regarding the suppliers' experience, reliability, and post-installation service offerings
- Only 1 in 5 suppliers delivers the information needed to estimate the final price of a solar panel installation
- Most households in Chile are only offered the option of paying the entire cost of solar panels up-front.
- Few households can actually afford to finance their solar energy investment like this, which limits the group of potential consumers

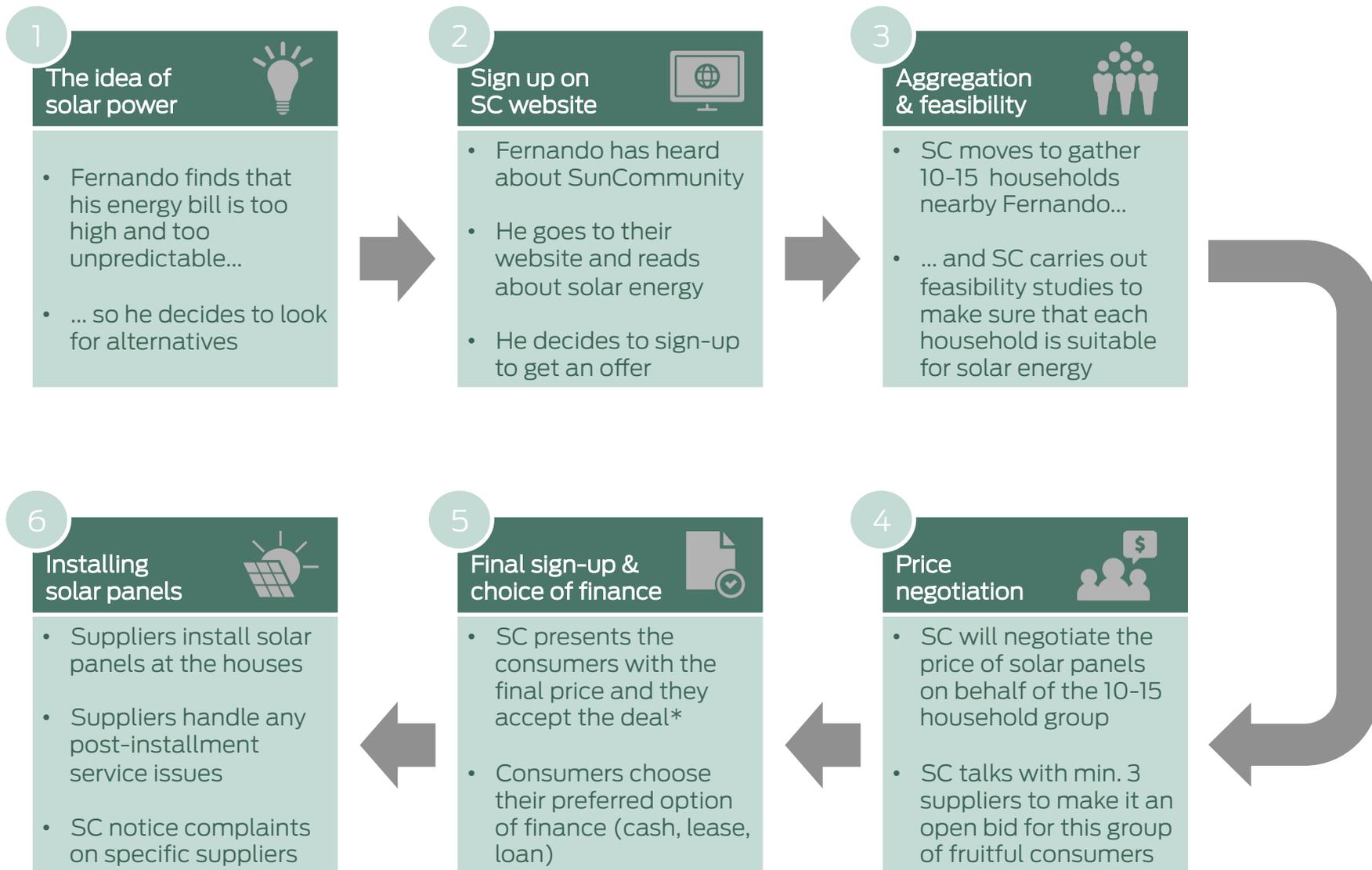
# The SunCommunity solution: SunCommunity aggregates potential consumers in order to increase negotiation power and lower the prices of solar panels



## Value propositions



# Step-by-step solution: Through the SunCommunity webpage, potential consumers will be able to sign-up and receive affordable prices of solar panels



\*We recognize that there is a risk that some consumers will sign-up in step 2, but end up not buying solar panels anyway. We have three ways to minimize this risk: (I) Either make consumers in step 2 commit to paying for the feasibility studies if they reject the final offer, (II) sign more than 10-15 households up in step 3 to take account for possible decliners, or (III) simply wait for another household to join the group if some households will not accept the offer in step 5.

# Market conditions in Chile: There exist a range of factors making the conditions for expanding solar energy to households throughout Chile attractive

Factor	What is it?	Why is it attractive?
 <p>Large market</p>	<ul style="list-style-type: none"> <li>• +0.4M high-end households</li> <li>• More than 42% of interviewees* pay +\$150/month for electricity</li> <li>• Chileans search more for "paneles solares" than any other country</li> </ul>	<ul style="list-style-type: none"> <li>• Not only is the Chileans solar energy market large...</li> <li>• ... it is also a very attractive market to enter right now</li> </ul>
 <p>High radiation → effective solar panels*</p>	<ul style="list-style-type: none"> <li>• Chile has one of the highest radiation levels in the world...</li> <li>• ... and there is on average around 2,500 hours of sunshine yearly</li> </ul>	<ul style="list-style-type: none"> <li>• The higher the radiation, the more effective solar panels</li> <li>• The more the sun shines, the more energy is produced</li> </ul>
 <p>High energy prices**</p>	<ul style="list-style-type: none"> <li>• The average household in Chile currently pays \$154USD/MWh</li> <li>• This is significantly higher than the OECD average of \$111/MWh</li> </ul>	<ul style="list-style-type: none"> <li>• The price households are willing to pay for solar increases with the size of their current energy bill</li> <li>• This also expands the finance options SC can offer households</li> </ul>
 <p>Well functioning Net Metering Policy</p>	<ul style="list-style-type: none"> <li>• In October 2014 policy on net metering was put in place</li> <li>• This means that households are paid for the excess solar energy their solar panels produces</li> </ul>	<ul style="list-style-type: none"> <li>• The net metering policy decreases the price of solar panels greatly</li> <li>• Further, the policy indicates that the government is willing to promote solar energy solutions</li> </ul>
 <p>Developed solar energy market***</p>	<ul style="list-style-type: none"> <li>• With 2GW of solar power, Chile is by far the largest solar market in Latin America</li> <li>• These 2GW is generally big industrial solar power plants</li> </ul>	<ul style="list-style-type: none"> <li>• The solar power infrastructure in Chile is highly developed</li> <li>• There is a range of different suppliers already present in Chile</li> </ul>

\*We have conducted both street- and online surveys in Chile reaching more than 200 people in total

\*\*Energy price index of 2015 is from Statista

\*\*\*Research on the expansion of solar energy in Chile is from GTM Research

# Consumer and public support: So far, SunCommunity has obtained great support from both potential solar energy consumers and public stakeholders

Through both online- and street surveys, detailed focus group interviews, and multiple conversations with a range of governmental departments, SunCommunity has received impressive support.

## Potential consumers

### Numbers\*



- 61% of interview respondents have indicated an interest in solar panels
- 95% of interview respondents would consider solar panels if they were cheaper than today

### Statements\*\*



- *"I would love to buy solar panels together with my community"*
- *"All the existing suppliers give me conflicting information"*
- *"Doing it with others reduces my concerns about solar energy"*

### Commitment



- A gated community in Santiago has signed up to explore the SC solar panels solution
- SC looks to initiate negotiations with potential suppliers

## Stakeholders



José Arriaza

- Regional Secretary of Energy
- Will connect SC with the right people in the government of Santiago



Ignacio Rivas

- Municipality Manager of Energy in Santiago
- Will connect SC to gated communities interested in solar energy



Fabian Videla

- Advisor to the Ministry of Energy
- Former SIPA student (Class of '12)
- Connects SunCommunity to CEOs of major solar panel suppliers in Chile

SOLARIANT CAPITAL

- Extensive experience coordinating utility scale renewable energy projects
- Advices on the business development of SunCommunity



SELF

- SELF designs and implements solar energy solutions in poor countries
- Advices on the business development of SunCommunity

\*We have conducted more than 190 targeted online surveys and 50 street interviews with our consumer segment  
 \*\* We have carried out an in-depth focus group meeting with a potential gated community in Chile consisting of 15 people

# Key learnings: Over the past 4 months, SC has tested and revised its model several times as the result of feedback from consumers and experts

By carrying out more than 190 online surveys, 50 street interviews, a detailed focus group meeting with potential consumers, preliminary talks with suppliers, as well as multiple conversations with public institutions in Santiago and Chile, SunCommunity has secured some key learnings



### Price and information are key points

50% of respondents to our interviews indicated that price were the main reason they have not invested in solar panels, while 25% pointed to poor information as the reason



### Investing in solar panels together is crucial

2/3 of the focus group indicated that they felt more secure investing in solar energy together. This both reduced their insecurity about the new technology and gave them a sense of doing good together.



### The government is looking into solar options

Both the national and regional government in Chile is looking into new ways to take advantage of Chile's great potential for solar energy. The Regional Minister of Energy in Santiago is specifically interested in SC.



# Current products: So far, SunCommunity has created and tested an initial webpage as well as a marketing video explaining the SunCommunity concept

To prepare for an early market entry, SunCommunity has prepared, launched, and received extensive consumer feedback on both a "sign-up" webpage and a marketing video

## "Sign-up" webpage



- **First version:** SunCommunity has launched the first version of its marketplace webpage
- **Database:** The objective is to develop an initial database of interested consumers
- **Information:** Potential consumers can sign-up and provide information on their location and current energy bill

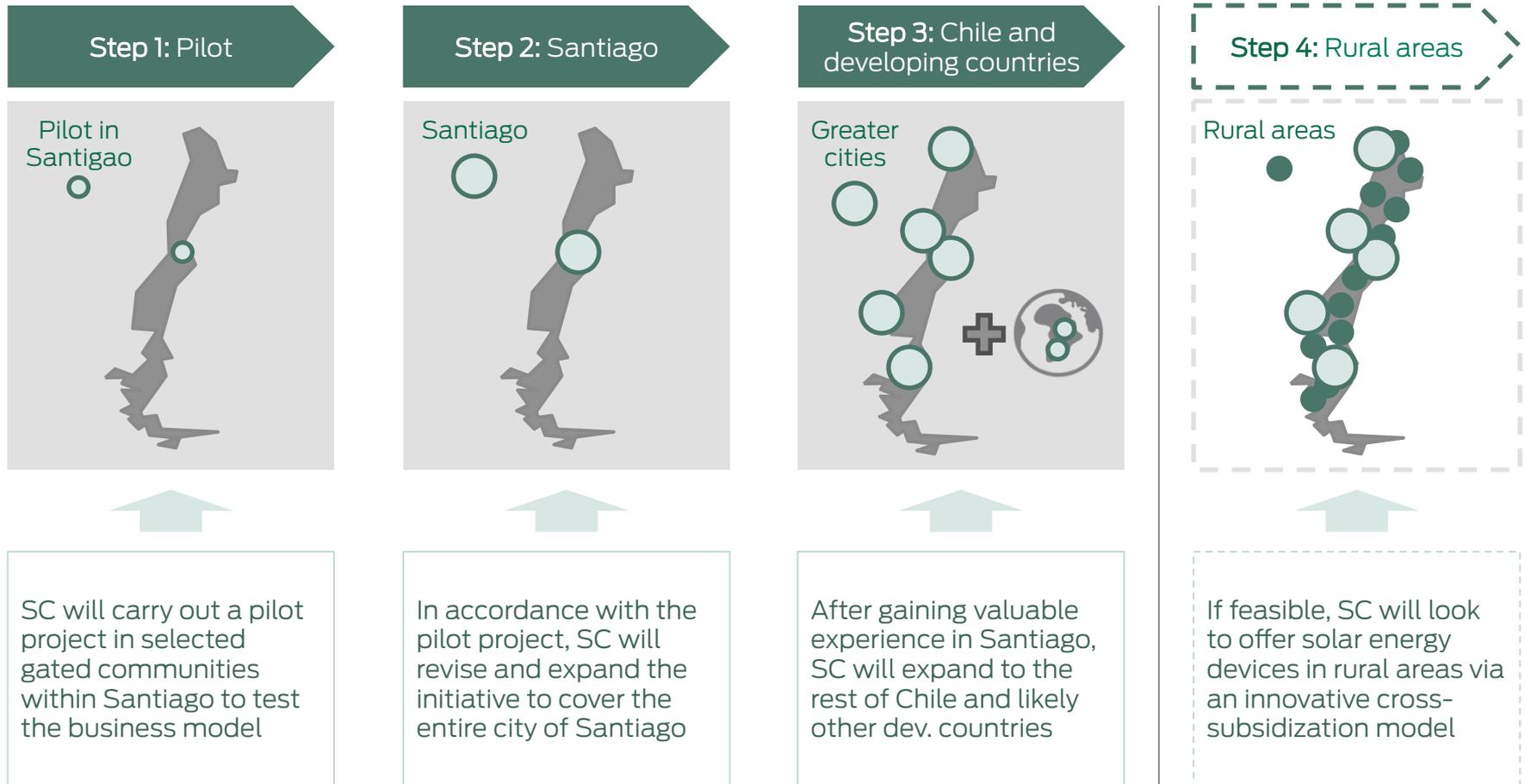
## Marketing video



- **Marketing tool:** This video serves as an outreach and marketing tool explaining the concept of SunCommunity to potential consumers
- **Tested and revised:** The video has been tested and revised multiple times
- **URL:** [https://www.youtube.com/watch?v=Zk\\_MwrhR\\_Gc](https://www.youtube.com/watch?v=Zk_MwrhR_Gc)

# Scaling: SunCommunity will validate the business model through a pilot before expanding the concept to the rest of Chile and likely other developing countries

SunCommunity plans to test the business model in a pilot project in Santiago, subsequently expand the initiative to the other greater cities of Chile, and potentially go abroad to launch in other developing countries. If possible, SunCommunity will later seek to expand its initiative to offer affordable solar energy devices to vulnerable rural areas of Chile through an innovative cross-subsidization model.



# Financial model (1/2): SunCommunity will launch as a non-profit, as we find that this makes for a better marketing story...

SunCommunity will lever the status as a non-profit organisation to position itself as the company that puts the customer first and it will rely on philanthropic foundations, government support, and challenge grants to cover the start-up costs

## Financial set-up

Non-profit organisation
<p><i>SC will set up as a non-profit, essentially because we believe it will contribute to the organisation's efforts to be the trustworthy and reliable partner that potential consumers of solar energy need</i></p>
Funding sources
<ul style="list-style-type: none"> <li>• <b>CORFO:</b> Innovation grants for small social enterprises in Chile</li> <li>• <b>ENGIE:</b> Invests in new energy ventures in Chile</li> <li>• <b>MINISTRY OF ENERGY CHILE:</b> Supports ideas through Laboratory of Government Funding</li> <li>• <b>GOVERNMENT OF SANTIAGO:</b> Supports new initiatives through the Public Good Initiative</li> <li>• <b>CHALLENGE GRANTS:</b> SIPA Dean's Challenge, MIT Clean Energy 2017, GPPN Conference at Science Po etc.</li> </ul>

## Core elements of the business model

<p>KEY COSTS</p> 	<ul style="list-style-type: none"> <li>• Marketing costs</li> <li>• Feasibility studies</li> <li>• Platform maintainance</li> </ul>
<p>KEY REVENUE</p> 	<ul style="list-style-type: none"> <li>• Earned income:               <ul style="list-style-type: none"> <li>• Transaction fee</li> </ul> </li> <li>• Raised income:               <ul style="list-style-type: none"> <li>• Donations</li> <li>• Grants</li> </ul> </li> </ul>
<p>KEY RISKS</p> 	<ul style="list-style-type: none"> <li>• Consumers dropping out</li> <li>• Technology prices decrease</li> <li>• Suppliers deliver poorly</li> </ul>

# Financial model (2/2): ... and we will need approx. \$36,000 USD to launch the 12-month pilot project in Santiago

COSTS (in USD)	
<b>Start-up and capital costs</b>	
Webpage development	270
Video development	550
Field trips to Chile	7520
Legal advisor	300
<b>Subtotal</b>	<b>8640</b>
<b>Operational costs</b>	
Outreach	
Marketing campaigns	25200
Content development	400
<b>Personnel</b>	
CEO (Gabriel Guggisberg)	6000
Engagement manager (Gabriel Correa)	6000
Concept dev. manager (Anders J. Enghild)	6000
Accountant	400
<b>Key activities</b>	
Feasibility studies	7200
Webpage maintenance	600
Community customer events	5400
<b>Subtotal</b>	<b>57200</b>
<b>Total costs</b>	<b>65.840</b>
<b>REVENUE (in USD)</b>	
Transaction fee (5%)	30.000
<b>Total revenue</b>	<b>30.000</b>
<b>RESULT (in USD)</b>	
<b>CHANGE IN NET ASSETS</b>	<b>-35.840</b>

### Main assumptions

- **General**
  - Pilot will last 12 months
  - Target is mainly high-end communities in Santiago
- **Costs**
  - Wages will be paid in the last 6 months of the pilot (post-graduation)
  - SC will launch a marketing campaign every month
  - SC will carry out 18 feasibility studies and hold 18 special events for these communities
- **Revenues**
  - 300 KW of solar technology installed
  - 10 gated communities with avg. 15 households each
  - Each household needs on avg. 2.0KW
  - Total avg. cost for each household is \$4000 USD
  - SunCommunity take a 5% transaction fee

# Business Model Canvas: Below is an overview of the key nine elements of the SunCommunity business model

1
2
3
4
5

