

# We transform environmental footprint into value

Confidential. All rights reserved. 2020

August 2020



## Table of contents

- o The problem
- Our solution
- o Our transformation journey
- o Market opportunity
- o Our business model and capabilities
- o Competitive landscape and our differentiator
- o Our team
- o Sales & distribution
- o Clients
- o Our economic model
- Financials and business traction
- Financial projections
- o Capital needs and use of funds
- o Appendix





## The problem

The inefficient use of energy, water and gas is a **financial and sustainability problem**.







Lack of information (Data may be abundant)

"Energy costs have been increasing rapidly with no clear cause" Management solutions are costly, not suitable, inflexible

"Finding out energy inefficiencies is costly and hard to measure" Analytics decoupled from business reality (...and expensive to customize)

"Data collected and available is not helping people nor systems make decisions" Limited insights delivering one-off results, curtailing adoption

"Constantly falling behind efficiency, sustainability, and cost reduction goals"



## It is a common problem

# Commercial buildings



# Restaurant operators

# Fresh produce co-packing

# Soft drinks production





Commercial

Industrial



## Our solution

Tailored end-to-end B2B software-based platform designed to optimize energy resources usage in precise correlation to business performance

Opportunities





## **Our transformation journey**





## 

### 19% efficiency in 3 years through a custom playbook

Pre-COVID -19% Off-hours / Peak-hours / Load Mgmt. / RAC Optimization



Low occupancy -37%

**Delivery -57%** 



Lockdown -74%



[Energy efficiency from baseline pre-pandemic consumption (%kwh)]



## Market Opportunity



#### Trends

- + Electrification & digitization
- + Adaptability & remote

#### **Product-market fit**

Set to achieve 10x in revenue in 3 years

- + \$2m savings achieved for our clients in Mexico:
- ✓ 1<sup>st</sup> and 2<sup>nd</sup> largest restaurant chains operators
- Largest agro-industrial exporter
- ✓ 3<sup>rd</sup> largest bank in Mexico

#### \$ = U.S. Dollars

\* Direct electricity consumption reduction of 5% for overall power demand in commercial, industrial and agro sectors

Source: International Energy Agency; U.S. Energy Information Administration, NERA Economic Consulting, S2G Energy analysis and estimations



## Our business model

Targeting customers with scalability potential (multi-site), EMaaS is a turn-key solution with two revenue components:



### Set-up [one time]

- IoT sensor deployment
- Data integration
- 60% of revenue in 2019



### Service [12 to 36 months]

- Platform customization
- Modeling and analytics
- Control and automation
- Usability, adoption, and value



Up to 18% energy efficiency in 12 months



## Capabilities to deliver value

Sensors	Data integration	Energy Assistant					
<ul> <li>IoT</li> <li>Ultrasonic</li> <li>Flow meters</li> <li></li> </ul>	<ul> <li>BMS</li> <li>ERP</li> <li>Telemetry</li> <li>Weather</li> <li></li> </ul>	<section-header></section-header>	Web platform	State fiests Finise fiests Composition actual 26 °C Composition actual 25 5°C Verside fiests Composition actual Composition actual Composition Composition actual Composition actual Composition a			
Electric Wate	er Gas						



## **Competitive landscape**

#### **Competitive landscape**



We're the only player offering the whole package with a highly competitive cost-to-serve from Mexico to any client in the world:

### ✓ Top talent

- High degree of customization
- ✓ Personalized service



## Our differentiator

High Flexibility	F	ast Adoption
<ul> <li>Quick installation non-invasive IoT measurement</li> <li>Adaptable scope at any time</li> <li>Data collection agnostic, can work with existent data capturing systems if open and available</li> <li>Short-lead times for insights and analytics</li> </ul>	<ul> <li>Tailored automation</li> <li>Solution training r</li> <li>Centraliz</li> <li>Dedicate "energy point</li> <li>Manager</li> </ul>	visualization, analytics, control and on designed alongside client team embeds in client's workflow/low equirements ation of insights and decision making d customer success team working as partners" leveraging change ment
<ul> <li>Remove all barriers or constraints to data collection, processing and usage</li> <li>Cost-effective and truly scalable</li> <li>Investment allocated where the business really needs it</li> </ul>	Impact • Direct en first year • Clear RO • Additional operation • High swit	ergy savings up to 18% during the I of sustainability initiatives al savings from continuous nal improvements tching costs

Seconerry Think of us as the EVs for the efficiency industry						
	EMaaS					
Environmental impact	65% of global CO2 emissions	30% of global CO2 emissions				
Mind-blowing user experience, irrefutable value and difficult to let go of						
Barriers to entry	Low priority on cost reduction & sustainability	High up-front cost				



### Our Team



### Management

*Geronimo Martinez* CEO & Co-founder B.S. Mechanical Engineering IESA Executive Education



Luis Carmona COO B.S. Electrical Engineering MBA Columbia Business School



10 10 10 10 10

Vivian Espinosa BD Leader B.S. Chemical Engineering MBA Thunderbird School of Global Management



### **Board of Directors**

Stephan Nathusius Co-founder B.S. Systems Engineering OPM Harvard Business School

*Gustavo Guilarte Co-founder B.S. Business Administration* 

Oscar Gil Co-founder B.S. Mechanical Engineering MBA Harvard Business School



### **Sales & Distribution**



15



## **Target Client**





### **Our clients**





### Our economic model

#### Unit economics

Lifetime Value (LTV) Client Acquisition Cost (CAC)	\$1.2m \$22k			
	Commercial	Industrial		
Annual recurring revenue per client	\$105k	\$76k		
Gross margin	66%	49%		
Energy expense savings	10 - 12%	5 - 8%		
Typical service contract duration	36 mo.	24 mo.		

· · · · · · · · · ·

\$ = U.S. Dollars

18



### Financials & business traction





### Forecast 2020





### **Financial Projection**



<sup>1</sup> Currency figures have been converted to USD at exchange rate of MXN \$21.72/USD



### **Financial Projection**



• Revenues to cover cost base starting July 2022

• Positive net cash flow in July 2023

<sup>1</sup> Currency figures have been converted to USD at exchange rate of MXN \$21.72/USD



### Capital needs and use of funds

### What we are looking for

- Issue a convertible security through a Simple Agreement for Future Equity (SAFE) to fund company for the next 18 months, but willing to discuss alternative options.
- Position our company for a stronger future: a solidified business model and product, aggressive business development in a larger addressable market, offer value-based enterprise energy efficiency services from Mexico to the whole region



### Use of funds

- Productize our current solution to offer modules segmented according to client needs
- Enhance commercial efforts by funding pilots, expanding marketing and developing a salesforce
- Ensure operational continuity and talent development



## SAFE security prospect

- Simple Agreement for Future Equity with a Post-Money Valuation Cap and No Discount (Download detailed structure here)
- Targeting a USD 1.5 million raise and a 10% ownership sold
- Post-money Valuation Cap: USD 15 million
- No maturity date, no interest
- Any size of Equity Financing will trigger the SAFE to convert into equity following the conditions provided in the structure above
- A pro rata right option is open for negotiation and could be granted in the case of a single investor (<u>Download standard Pro Rata Side Letter here</u>)

\*\*\*



Snart and Resilient Cities Accelerator



<u>Contacts:</u> Geronimo Martinez CEO <u>geronimo.martinez@s2g.energy</u>

Luis Carmona COO <u>luis.carmona@s2g.energy</u>

Unleash your energy advantage

Darwin 32, 7th Floor, Colonia Anzures, Miguel Hidalgo, CDMX 11590, México.

\*\*\*





## Appendix





## **Financial Projections**

	Fundraising Scenario Slides 21 -24	Upside Scenario Slides 28 - 29
Cumulative EBITDA	USD 2M	USD 5.4M
Avg. EBITDA Margin	15%	26%
EBITDA Margin on 2025	32%	35%
Cashflow positive on	July 2023	July 2022



### Upside scenario projection



<sup>1</sup> Currency figures have been converted to USD at exchange rate of MXN \$21.72/USD



### Upside scenario projection



• Revenues to cover cost base starting January 2022

• Positive net cash flow in July 2022

<sup>1</sup> Currency figures have been converted to USD at exchange rate of MXN \$21.72/USD



## Case study: Bottling

### Boosting overall energy performance [lts/kWh] for a large bottling co.

#### How we helped

- +150 Panoramic Power sensors were installed for monitoring 1 site producing 2.5m lts/day.
- Correlating production lines data (energy and bottling temp.) with services data (ammonia and air compressors), behavioural opportunities were identified.
- Empowering people and teams to make day-to-day decisions anticipating energy cost and usage implications that improve the lts/kWh KPI.

#### The benefits

- Through the adoption of the EMaaS Program, bottling co. has achieved considerable savings by improving overall energy performance by 6.7%
- Operations optimization by influencing ways of operation in and across Production, Planning, Quality and Maintenance teams
- Overall reduction in its environmental impact.





Driven by high energy cost and high intensity energy processes, bottling co. was looking to digitize their legacy manufacturing facilities to better understand and manage their energy consumption. They found that digitization is useless without the adoption of the technology in the form of discrete day-to-day operational decision making. EMaaS potentially will expand to 17 bottling co.mfg. sites.



## Case study: Hospitality

### Realizing savings for a nationwide Mexican hospitality chain

#### How we helped

- Over 2,000 Panoramic Power sensors were installed for monitoring 76 locations
- Using data from individual devices, the team generated actionable insights
- More than 4,100 hours of training, and saving strategies, EMaaS generated a transfer of knowledge to help CMR control their energy and generate savings

#### The benefits

- Through the adoption of the EMaaS Program and energy digitalization, CMR has achieved considerable savings of 6.36 GWh
- Operations optimization and an overall reduction in its environmental impact
- Net savings of \$3.2M MXN were achieved on the first year, generating a ROI of 167%





As a large energy consumer, CMR was looking to monitor, understand and manage its energy consumption across its multiple locations to manage their resources better and improve operational efficiency. They were looking for an organisation wide solution to help managers realize energy savings.



## Case study: Agro industry

### Performing Digital Transformation of a large Agro-Industrial Corporation

#### How we helped

- More than 1,200 Panoramic Power sensors were installed for monitoring 6 factories with 1.3GW total managed load
- Correlation of energy consumption of heavy machinery, refrigeration and other equipment with production volume, schedule and availability of raw materials
- Operations optimization through • combination of efforts of production and maintenance areas



#### The benefits

- Improvement of operational efficiency and predictive maintenance
- Achievement of energy cost avoidance by reduction of energy consumption
- Peak demand reduction via avoidance of high-intensity equipment usage at peak hours
- 8% less consumption per unit produced with the improved a tracking of KPIs (unit/kWh)





#### Background

One of the most important agro-industrial groups in Mexico, with 30 years of experience on the domestic market, operations in 7 different Mexican states and wide presence on international market. As agricultural industry is very energy intensive, their main priorities were to control energy consumption and carbon footprint, optimize the processes at the plants and reduce the production costs.

\*This results are from 6 factories, in which only 1 has one year with EMaaS and the others have approximately 4 to 6 months with EMaaS.



## Case study: Retail banking

### Digitizing energy in retail bank branches to capture savings

• Unbiased optimization of branch

• Energy consumption reduction

through active monitoring and

• Enablement of smart tools such a

Bots to empower decision making

• Remote equipment failure detection

maintenance planning

from branch manager or maintenance

personnel allowing real time decision

and prediction optimizing operational

temperature prioritizing customers'

dvnamic control of HVAC operations

#### How we helped

- 60 Energy Sensors installed in
   4 branches in two different cities
- Digital and real time visualization of energy consumption in order to make smarter decisions.
- Intelligent thermostats for obtaining temperature data and establishing heating and cooling set-points.
- Creation of baselines for energy consumption comparison.
- Consumption prediction capabilities leveraging proprietary algorithms





operations

#### Energy avoidance in suboptimal HVAC

The benefits

comfort

making

Yearly cost avoidance per site

**MXN** 

\$124k



#### Background

A large financial institution with over 1,000 retail branches wants to lower costs at its branches operations and enhance its sustainability efforts beyond procuring energy from renewables utilities operators. A proof of concept has been put in place to digitize energy consumption, monitoring and optimizing lighting and HVAC usage as well as data servers' operations. A business case has been established to escalate EMaaS.

33



## **Case study: Spirits**

### Tequila production grinds Digital Energy

#### How we helped

- Over 75 Panoramic Power Sensors (a Centrica Company) deployed in strategic locations within production process
- Benchmarking of equivalent equipment within grinding process to adjust the tension of belts for optimal crushing
- Dynamic reports created to empower people across to make decisions and take actions targeted to optimize their energy consumption



#### The benefits

- Energy savings were achieved through the adoption of optimal production schedules
- Predictive maintenance measures were adopted based on insights generated through the digitalization of critical equipment
- Real time Power Factor monitoring helped in selecting an adequate capacitor bank, reducing economic penalties





#### Background

This tequila producer is engaged in reducing their overall environmental impact. In their actions to reach their sustainability objectives, they found digitalization as a way to reduce energy waste and to empower people with real-time information for decision making in order to improve their operations.



### Case study: Concrete production

### Digitization to balance total logistic costs

#### How we helped

- Unified data from different sites. both electrical and production in a gamified platform
- Operations optimization avoiding unnecessary consumption in the transportation belt processes
- Correlation from internal and external variables for daily energy forecasting
- Understand total logistic cost of dispatching concrete to customers including energy intensity

### 45% Energy usage optimization



Voltage unbalance identified on main connections



- KPI's standardization within regions and plants
- Optimal production range identification based on the daily energy performance indicator
- Predictive maintenance in order to avoid unprogrammed plant shutdowns, by providing information of current and voltage unbalances

8%

**Energy cost** 

avoidance



A cement, concrete and aggregates production company, always leading through innovation. The magnitude of the business makes it fundamental to control one o main raw materials, electricity, therefore the need to be efficient. Related to this, interest in the transition into renewable energy, requires cost-effective technology capable to predict and justify the daily consumption of energy in every plant.



### Energy analytics



### Compressors benchmarking





### Anomaly detection

### Real-time digital utility bill







# *Real time total energy flow*



# Energy intensity dynamic linear regression





### S2G Energy bot®













### Water and gas management





SEG <sub>enne</sub> Consumo Diario	Consumo Mensual	Seleccionar todo	(En blanco)	Cámicos	Lavado de Charolas	Masas	Ив	Procesados	
Fecha	Comportamiento por turno								
sabado, 11 de enero de 2020 💙		Turno 1		Turno 2		Paro		Turno	
Eficiencia (L/unidad)		1,571.9 (L/unidad)		1,987.6 (L/unidad)		(En bla (L/unidad	nco)	3,816 (L/unid	.8 ad)
2,345		48,730 Litros		57,640 Litros		6,370 Litros		72,52 Litros	0
Área de oportunidad		œ							
\$17,478	4.0	••							
Volumen (L)					i il			. 1	
185,260	(1) 142	°			1.1		1	.	
Producción (unidad)	- <u></u>	• •	<b>.</b>				ı. Hu d		
79	1.0				1				
		ı III.							

\*\*\*

21 14 11 12

41

. . . . .

. . . .

10.10 10.10



The information contained in this document contains PRIVILEGED / CONFIDENTIAL Information. The modification, retransmission, disclosure, copy or other use of such information by persons other than the intended recipient is strictly prohibited unless approved by Solar 2 Green Mexico S.A.P.I. de C.V. referred in this documet as "S2G Energy"