

Sustainability and Climate Change Agency, Chile

National Designated Entity of CTCN



August 23, 2019, Climate Week
Salvador de Bahía, Brasil



MISSION

To Promote sustainable production in Chilean enterprises, with an emphasis on SME's, in a public/private dialogue and participation context

About us

- ❖ Voluntary agreements
- ❖ Technology transformation
- ❖ Promotion and Subsidies
- ❖ Relationship with the private sector

Case Study

”Energy and Environmental Technology Transformation Program for the SME Segment of the Pork Industry”



Agencia de
Sustentabilidad y
Cambio Climático

ASPROCER
Asociación de Productores de Cercheros de Chile



UNIVERSIDAD TÉCNICA
FEDERICO SANTA MARÍA



PONTIFICIA
UNIVERSIDAD
CATÓLICA DE
VALPARAÍSO



PORK INDUSTRY PRODUCTION IN CHILE



- **Chile, 5th place in the International Ranking of Exports**
- **Export to 64 country**
- **63% of its production is exported to high demand countries (Japan, South Korea, Russia and China)**
- **2.43 million pigs.**
- **But the SME's don't comply with environmental standars**
- **33 SME's in Chile**

Objective

Promote, in the SME's, the use of energy and environmental technologies for the treatment of pig slurries that allow sustainable production in the long term, by reducing GHG and NH₃, making the activity compatible with nearby communities

Program Cost: US\$ 680.000





Program Components

1

**Diagnostic:
sector,
territory and
companies**

2

**Technology
Evaluation and
business model**

3

**Technical, legal
and financial
feasibility**

4

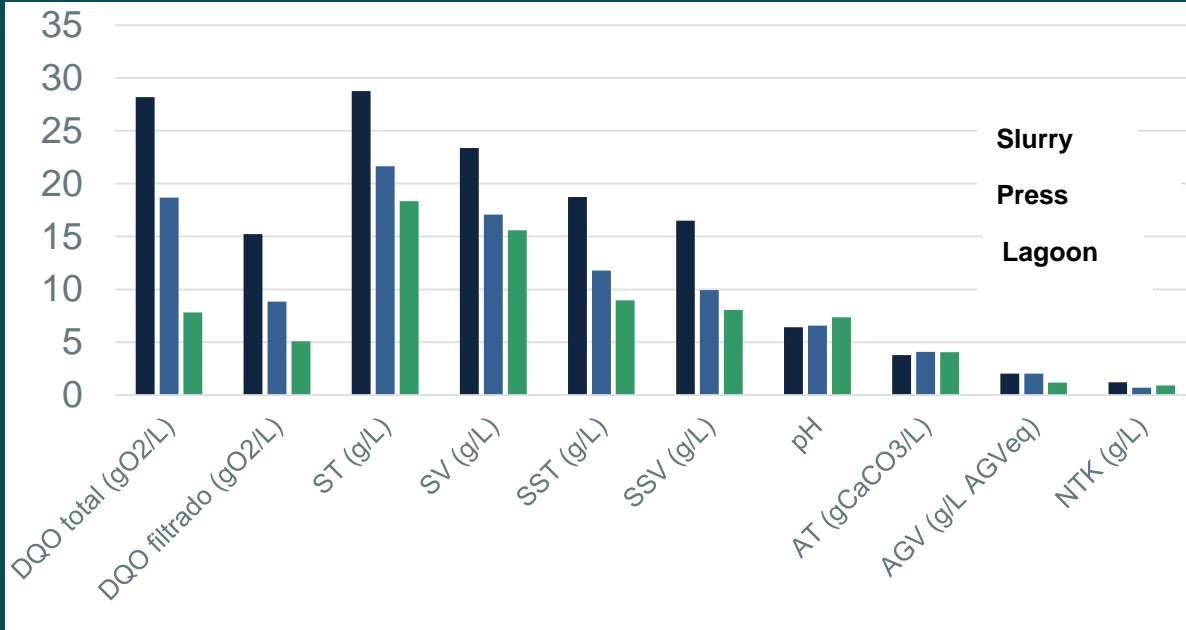
**Diffusion and
training**



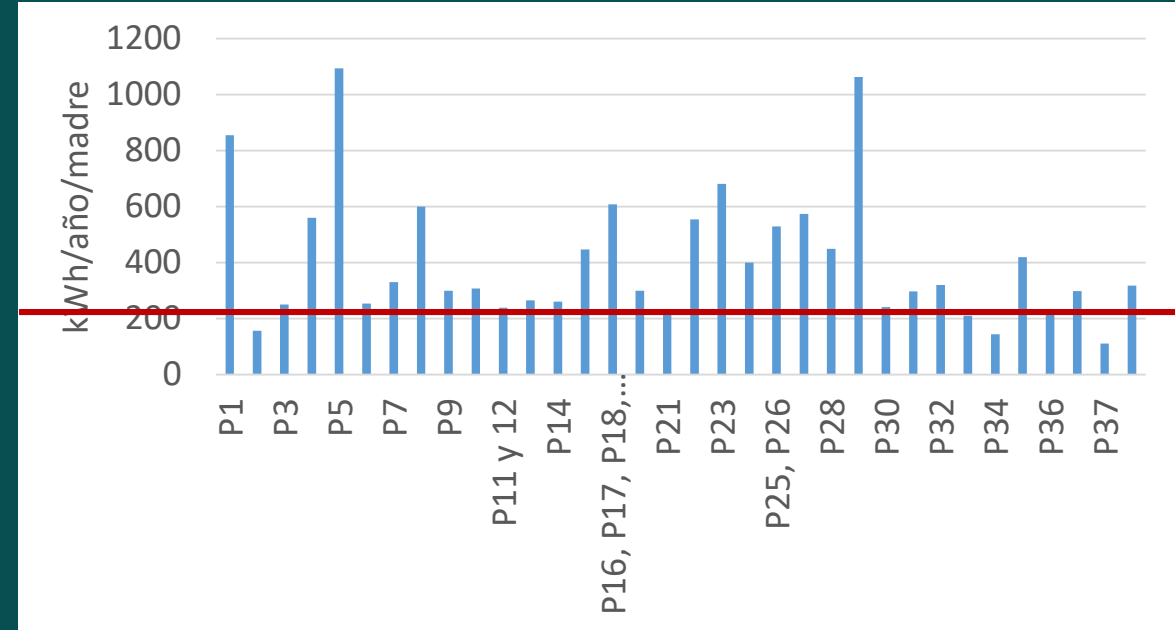
Program Results



Program Results

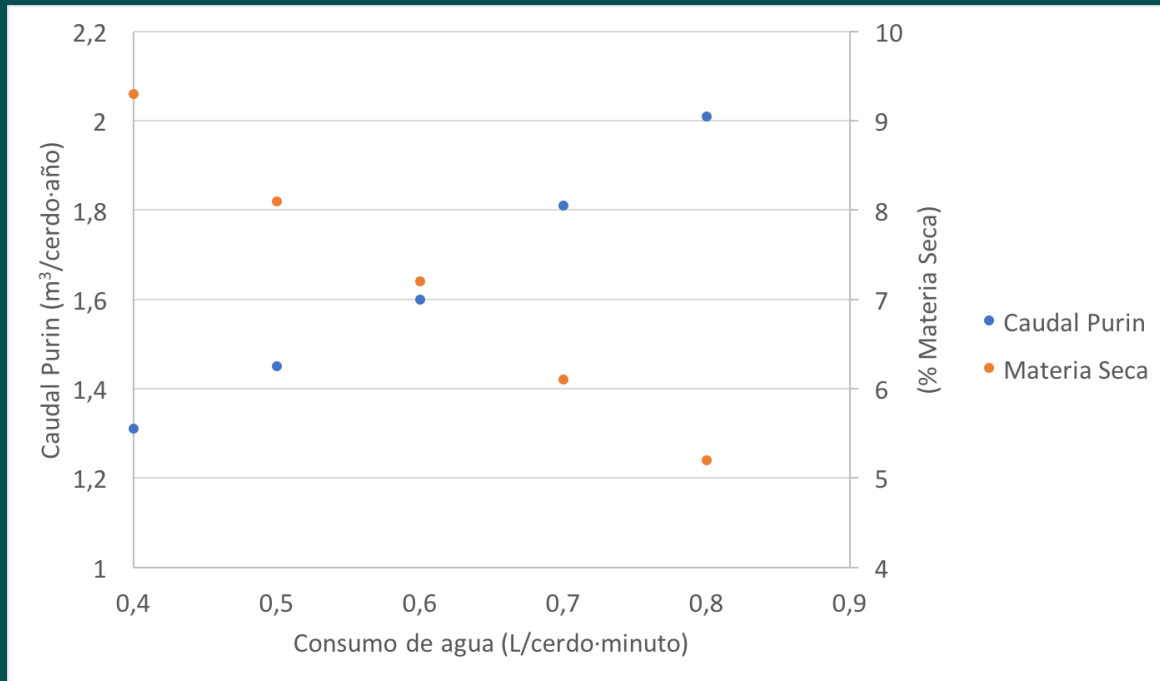


Characterization and quantification of critical parameters



Mother pig energy consumption per/year in farms

Program Results



Flow of slurries v/s water consumption and concentration of slurries in farms

**Odor emissions,
GHG y NH₃**

Total*: 219 Ton NH₃/year
Total*: 70.000 Ton CO₂eq/year

Total number Diagnostic farm

Final results

23 Anaerobic Digestion projects
+
2 Nitrogen removal projects

25 Projects for SME's

Total Investment (CAPEX) USD M\$ 10,7

*Reduction 23.000 Ton CO2 eq/year GHG
(only treatment)*



Additional Benefits

Biogas thermal utilization options

Fossil fuel replacement * GHG reductions

Obtaining stabilized digestate

Latest generation organ-mineral fertilizers

Reduction of odor emissions

Minimization of socio-environmental conflicts

SME Transformation

More Sustainable country



Whats Next?



Legal Requirements

Entrance of projects to the environmental impact assessment system

Financing options

Traditional Banking, Green Credit (State), Green Investment Platform

Sustainability Program

Strengthen the country's agro-export image in international markets as a provider of safe, healthy and sustainable food
236 M US\$



Sustainability and Climate Change Agency, Chile

Ximena Ruz Espejo
Technical Deputy Director

www.ascc.cl