

# Sustainable Energy for Communities

Vision



**Enabling communities  
to access sustainable  
and clean energy**



# HISTORY

Humankind has only started 70 years ago to move away from carbon based energy systems



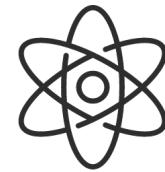
Fire from wood and  
agricultural waste  
100 000 BC - 10 000 BC



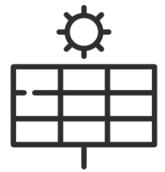
Domestication of animals  
10 000 BC - 1500 AD



Coal and later  
other hydrocarbons  
1600 - present



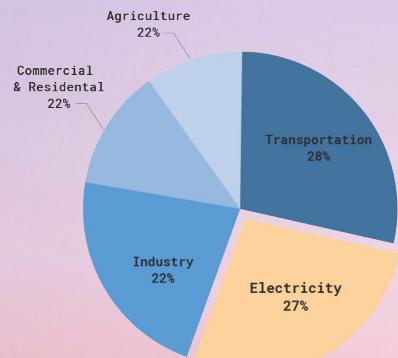
Nuclear energy  
1950 - present



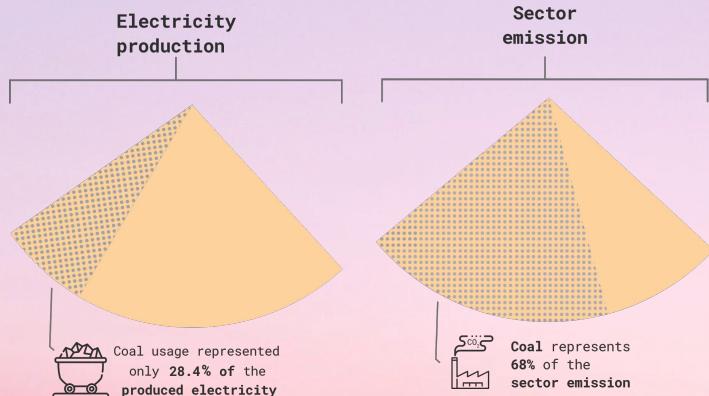
Renewable energy  
1970 - present

# THE CHALLENGE

Even though coal power generation is decreasing, it is still the main source of CO<sub>2</sub> emission



**Total U.S. Greenhouse Gas Emissions  
by Economic Sector in 2018**



**The CO<sub>2</sub> emission and production in the Electricity  
Sector of the United States in 2018**

# THE CHALLENGE

Global climate change is a challenge of collaboration, which the Paris Treaty has just started to solve now

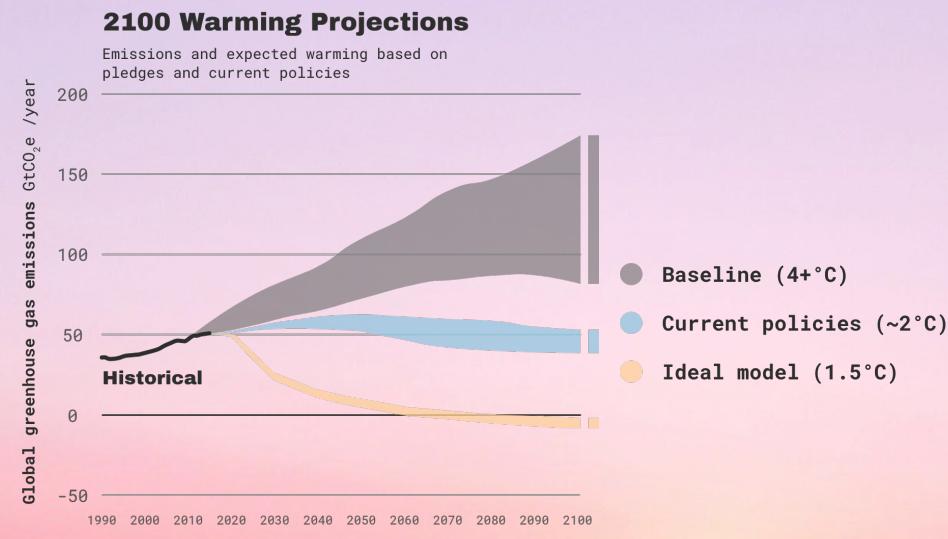
*"Mobilizing finance for investment and innovation in low-carbon energy is a key challenge for climate change mitigation."*

Friedemann Polzin, *Mobilizing private finance for low-carbon innovation – A systematic review of barriers and solutions, Renewable and Sustainable Energy Reviews*



# THE CHALLENGE

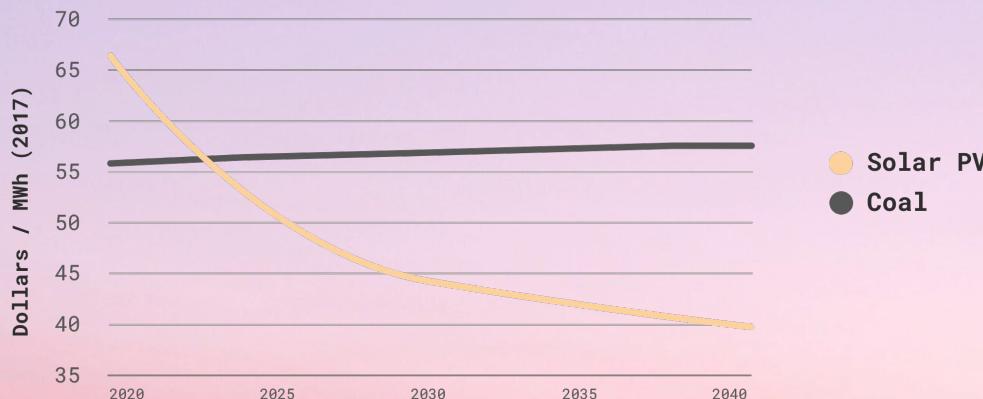
Even with the current policies humankind will face a certain level of warming, which is less than ideal



Addressing global warming, <https://climateactiontracker.org/global/temperatures/>

# THE CHALLENGE

As the LCOE\* for solar becomes cheaper than coal,  
the energy transition is becoming the profitable  
alternative



LCOE = Levelized Cost of Energy  
"Solar Photovoltaics Competing in the Energy Sector—On the road to competitiveness",  
European Photovoltaic Industry Association. September 2011.



# **SOLUTION TO THE COLLABORATION CHALLENGE**

**Blockchain based SolarDAO\* enables collaboration in self-organizing**

## **Energy communities on SolarDAO platform:**

- Self-sustainable locally sourced electricity
- Enables participation in the local energy related decision making and allows co-financing in RES assets
- Creating benefit for the economy, society and environment

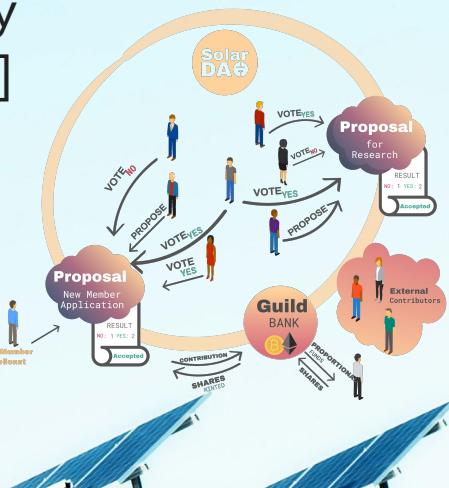
\* DAO is a Decentralized Autonomous Organization  
\* RES is Renewable Energy Source



# WHAT IS A DAO?

DAOs are new exemplars for corporate governance

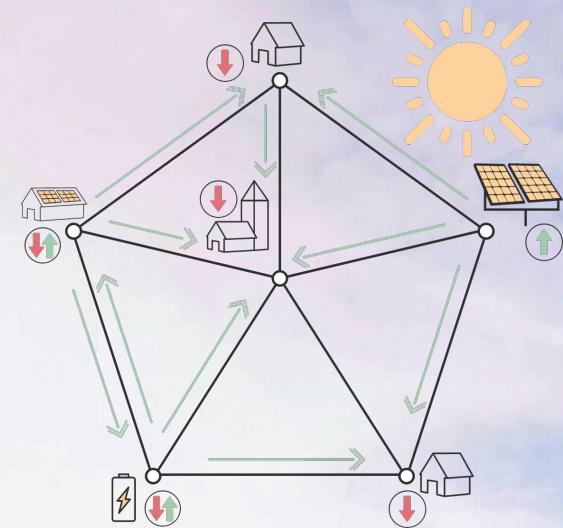
- There are no trusted human executives since the organization is governed and operated by smart contracts [.. on a blockchain network]
- Trust is encoded in the community
- Monitoring and enforcement of smart contracts are likewise [done] by computer algorithms



# SolarDAO PLATFORM

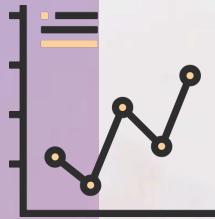
Uniquely brings five crucial features together to enable local energy communities

- Visualizes statistics
- Empowers DAO-like decision-making
- Enables co-financing of production
- Simple and secure platform
- Runs on  **energy web** blockchain (EWC)

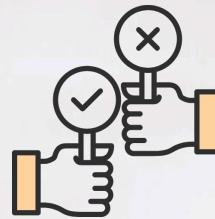


# SolarDAO FEATURES

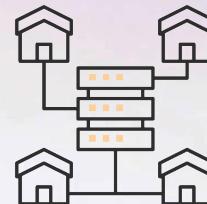
Uniquely brings five crucial features together to enable local energy communities



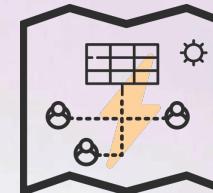
Dashboard with analytics



Decision making on DAO



Co-financing renewable source



Energy sharing map



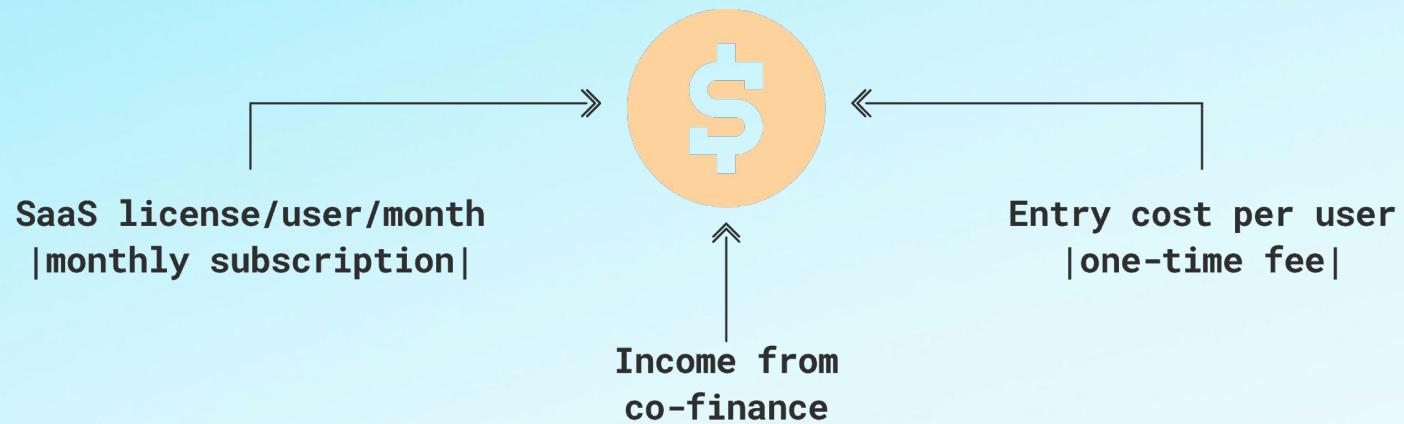
Education & gamification

Simple and secure platform, which runs on  **energy web** (EWC)



# SolarDAO BUSINESS MODEL

Will be sustained by a very cost-effective SaaS business model



Future scope:

- Energy sharing between communities (traceable green energy)
- Co-financing of local generation or multi-plant diversified portfolios



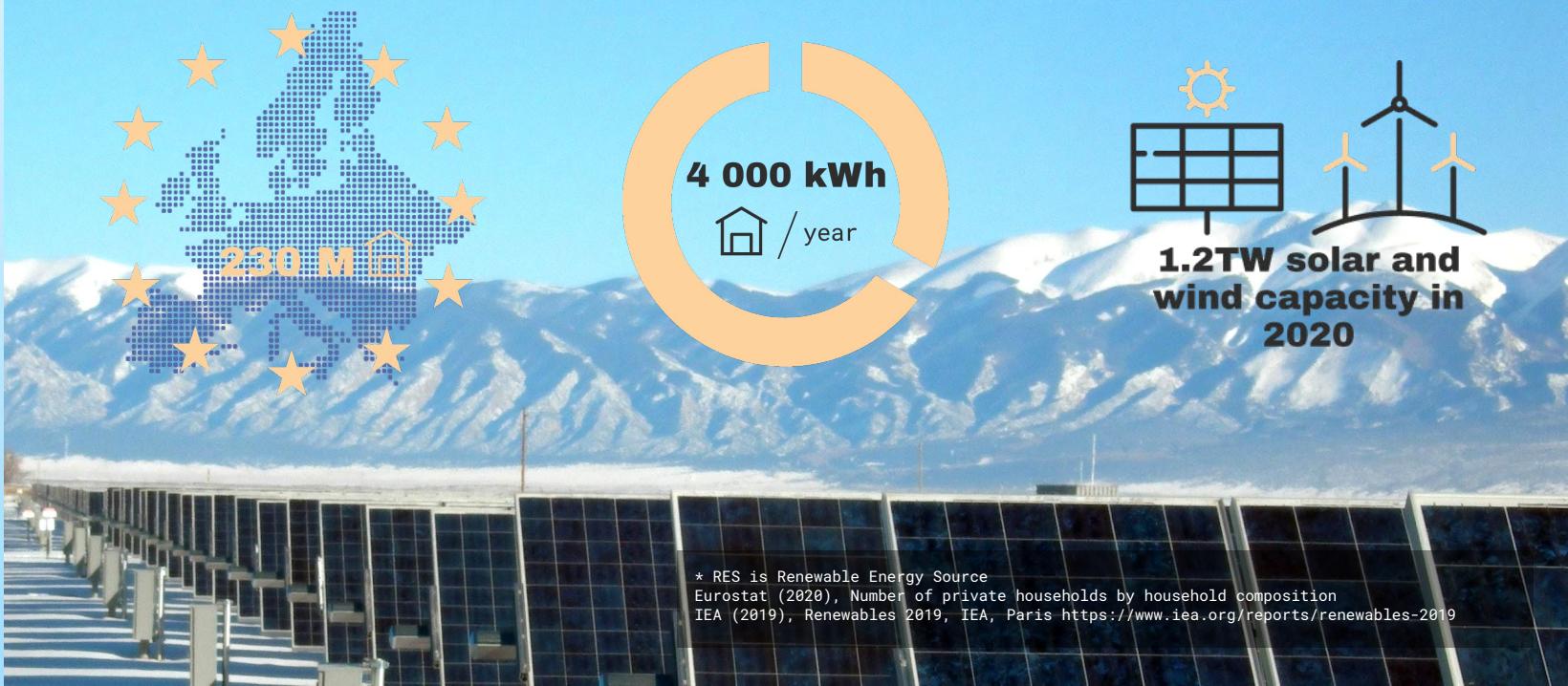
# SolarDAO COMPETITORS

Can deliver across all relevant renewable energy metrics vis-à-vis its competitors

	Return	Efficiency	Sustainability	Economic, social and enviromental effects
Regular power source	-	✓	-	-
Own solar installation	✓	✓	-	-
Other green energy suppliers	-	-	✓	-
Blockchain based cofinance platforms	✓	✓	-	-
<b>SolarDAO</b>	✓	✓	✓	✓

# MARKET SIZE OF THE EU

Currently 230M households and 1.2TW RES capacity could benefit from SolarDAO

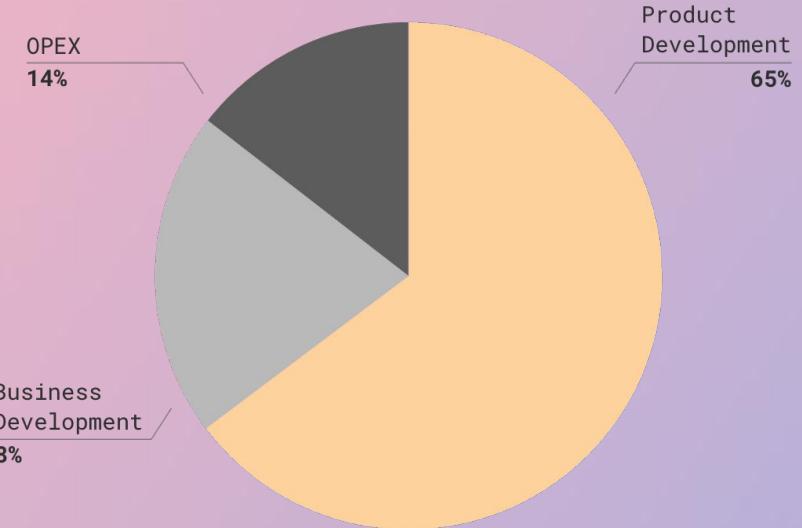


\* RES is Renewable Energy Source  
Eurostat (2020), Number of private households by household composition  
IEA (2019), Renewables 2019, IEA, Paris <https://www.iea.org/reports/renewables-2019>

# FINANCE

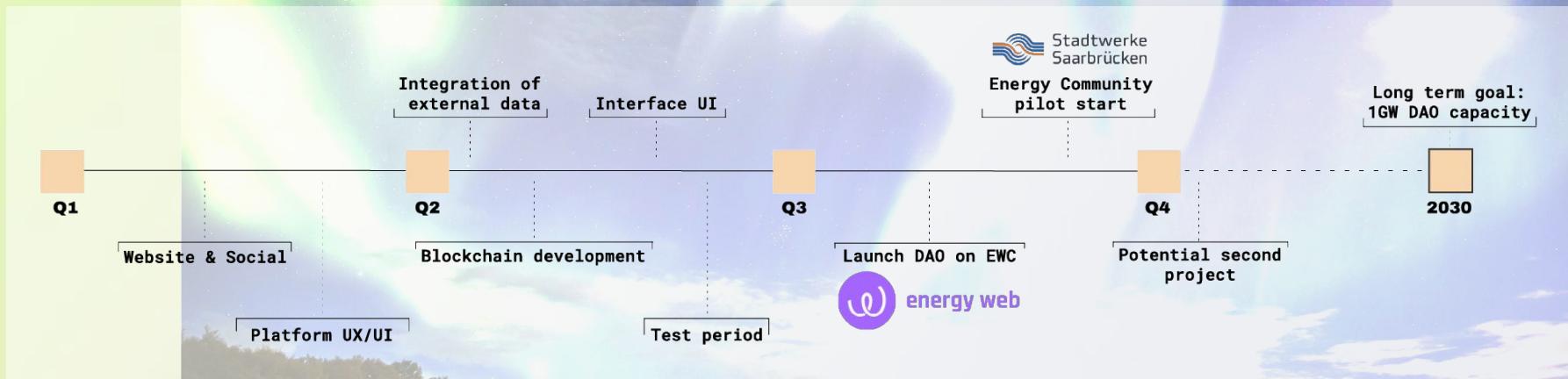
An EWF grant would be mainly used to develop the SolarDAO platform

- Smart contract development
- UX/UI development
- Branding and online marketing
- Pilot Project and proof of concept to be developed with Stadtwerke Saarbrücken



# OUR ROADMAP FOR INCUBATION PERIOD

Our product roadmap foresees a first operational pilot case at the end of our incubation period



# SolarDAO TEAM



Adrián

- Technical background
- Development
- CTO & Founder



Áron

- Design & Appearance
- UX/UI
- Designer & Co-founder