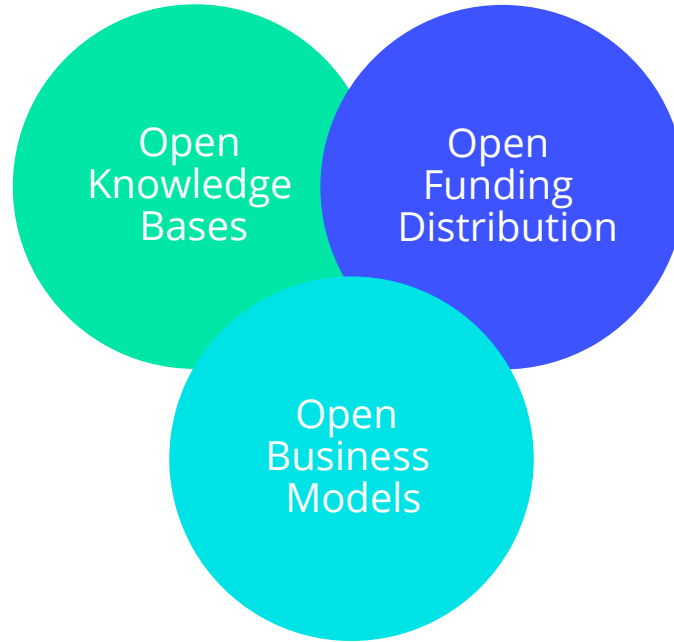




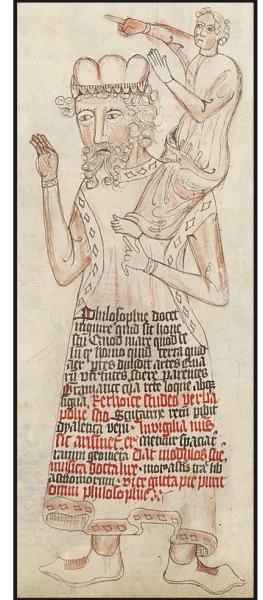
**Building a Free and Open Knowledge Base  
for Sustainable Technology**



An independent non-profit organization supporting research and business development based on free and open technology.

# Evolution in Open Knowledge Creation

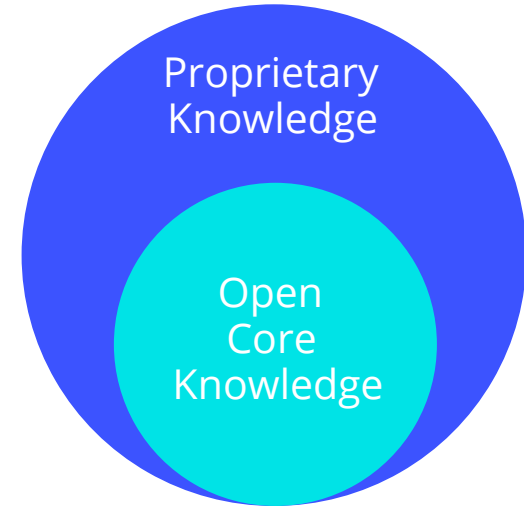
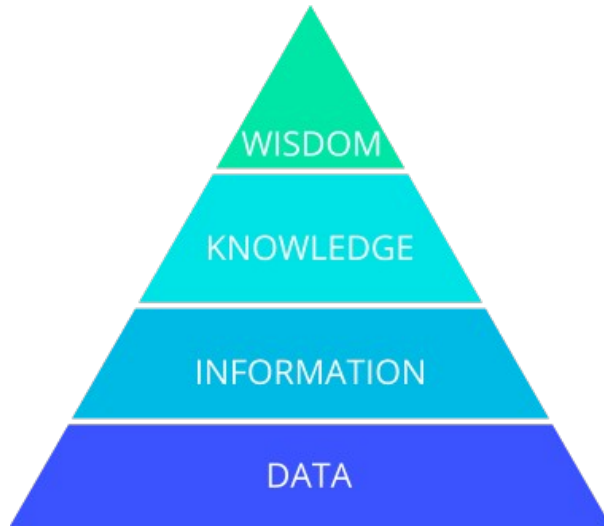
- ♦ 70 % of the worldwide code base is based on open source [1]
- ♦ Open Collaborative Innovation in Software Development
  - Cloud Computing [2]
  - High Performance Computing and Big Data [3]
  - Artificial Intelligence [4]
  - Robotics [5]
  - Web Technology [6]
  - Blockchain [7]
  - Embedded Operation Systems [8]



*"If I have seen further it is by standing on the shoulders of Giants."*  
- Isaac Newton

Wikipedia

# Why is Modern Software Development so Innovative?



Through the disclosure of information and knowledge, an innovative, resilient and independent business ecosystem has evolved within the software industry.

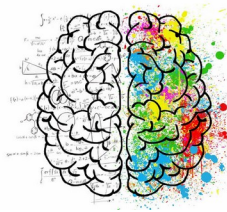
# What is the Secret of Open Collaboration?



Open Business  
Models [1]



Open Standards  
and Data



Reproducible Science  
and Knowledge



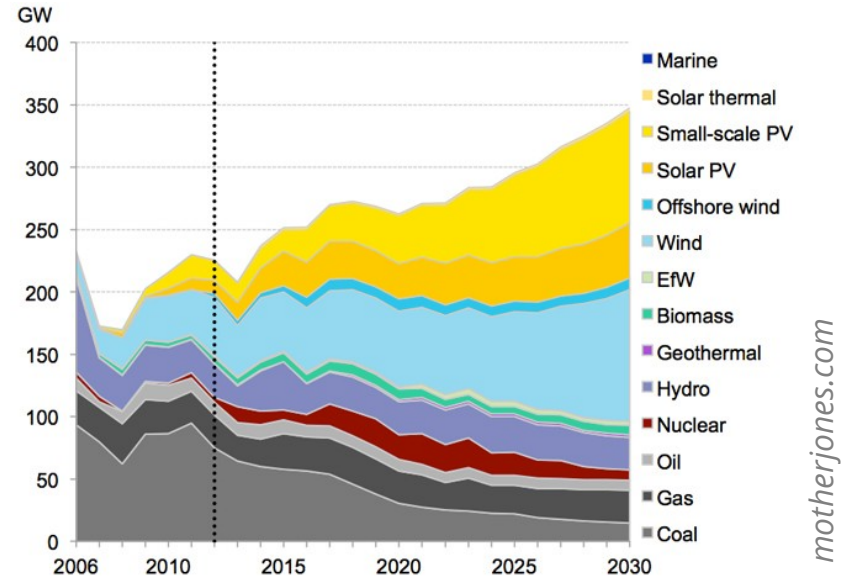
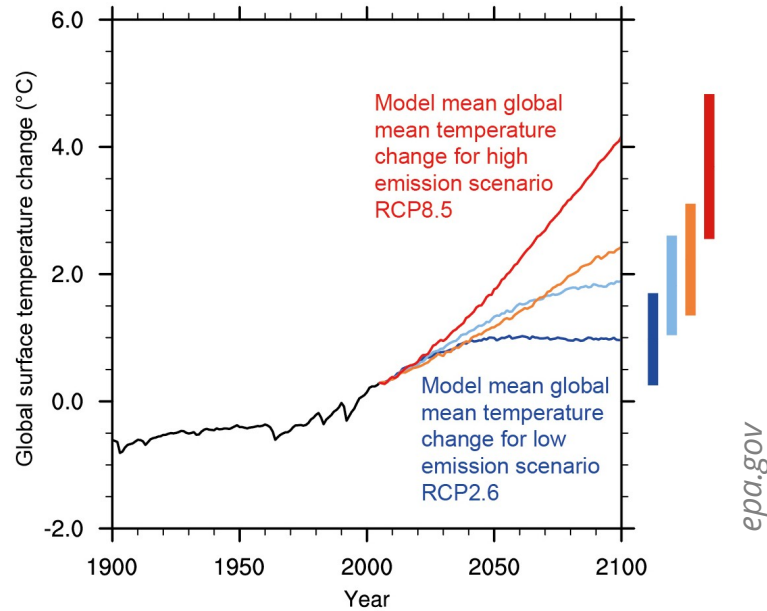
Inner Source -  
Open Source Culture  
within Organizations [2]



Open  
Community



# Climate Change - A Challenge in Collaboration



How can we spread knowledge, accelerate innovation and increase cooperation in sustainable technologies?

# Truly Sustainable is Open

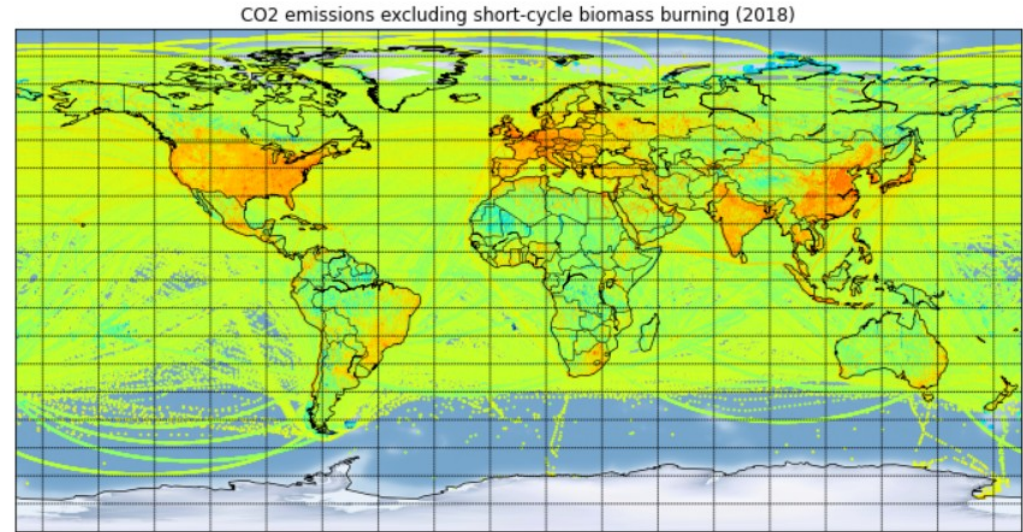
Only by exchanging sustainable technology and knowledge worldwide the impact of climate change can be reduced in the long term.



Open Collaboration and development methods have shown fast acceleration of nearly all knowledge based industries.



Independent and open technology gives us a real chance to reach global climate targets.



[https://edgar.jrc.ec.europa.eu/overview.php?v=50\\_GHG](https://edgar.jrc.ec.europa.eu/overview.php?v=50_GHG)

# A Knowledge Base for Open Sustainable Technology

- Provision of the first global platform of all sustainable, active and open technology projects.
- Everyone can contribute, discuss and extend the platform.
- All projects are free, open and sustainable for professional usage.

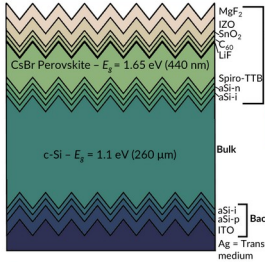


Artwork by Eleanor Lutz

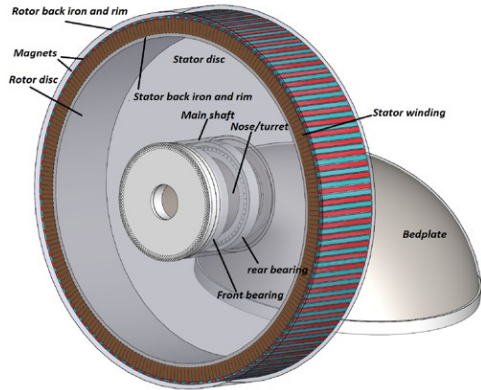
[Awesome List](#)



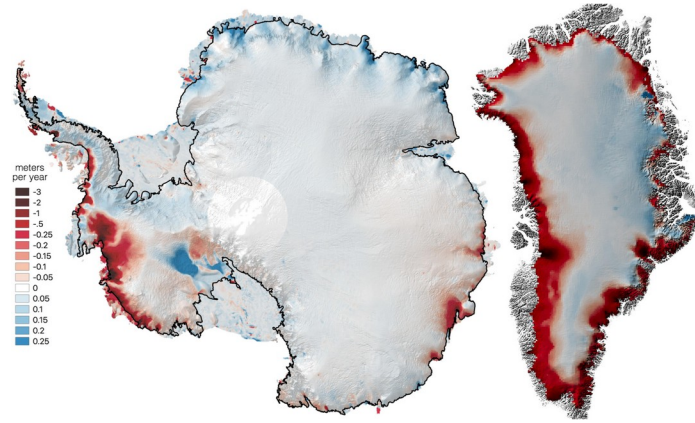
# Finding Hidden Gems



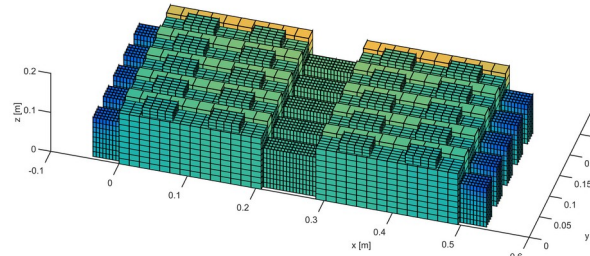
Raytrace Modelling in PV



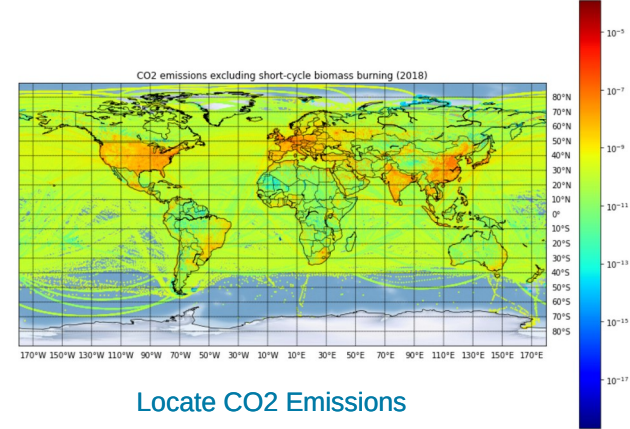
Reference Turbine Standards and Construction Plans



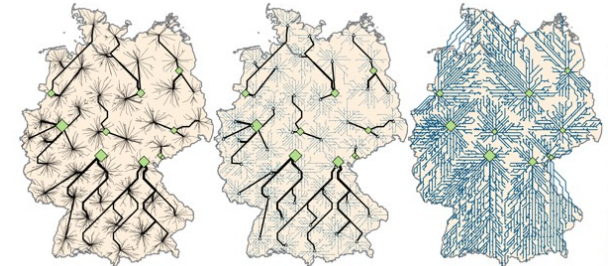
Monitoring the poles



Coupled Electrical-thermal simulations of battery systems



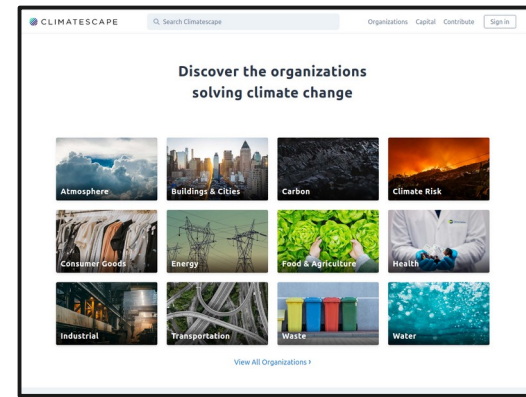
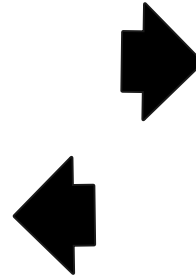
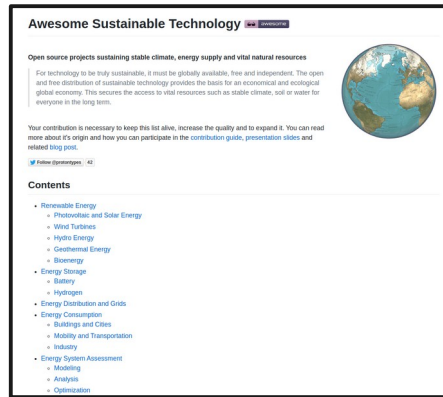
Locate CO2 Emissions



Hydrogen Infrastructure Model

# Scaling the List to a Knowledge Base

- ✓ Simple Data Structure
- ✓ Easy to Maintain
- ✓ Simple Overview



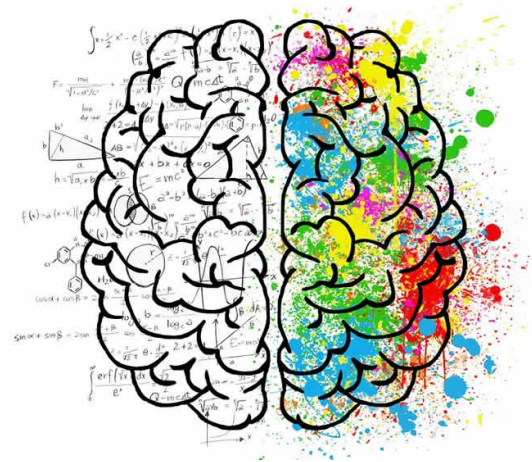
<https://climatescape.org/>

- ✓ Better Accessibility
- ✓ Cross Reference Topics
- ✓ Dynamic Features
- ✓ Newsletter
- ✓ Improved User Experience

How can we combine the advantages of an awesome list with the overview, usability and accessibility of a knowledge platform?

# How can you contribute?

- ♦ Contribute to the list and spread the knowledge
- ♦ Talk about the power of open technology
- ♦ Release and use open technology
- ♦ Donate to open and sustainable projects
- ♦ Add your knowledge, fix bugs, add features, ...
- ♦ Don't use patents, but license smartly



**Don't be afraid to share knowledge. Learn how to build open business ecosystems.**





**Thank you for your attention!**  
**We look forward to your**  
**questions and feedback.**



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- Tjark Döring: [tjark.doering@prototypes.eu](mailto:tjark.doering@prototypes.eu)