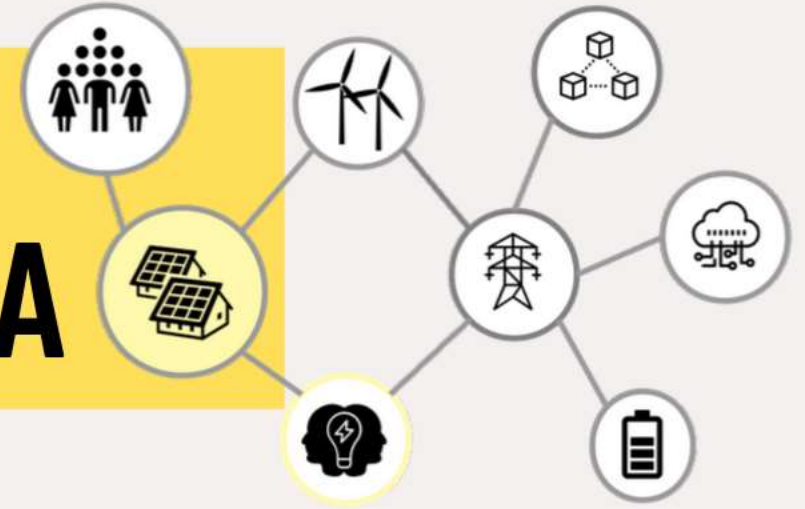


CONFERÊNCIA COMUNIDADES DE ENERGIA



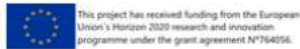
Pavilhão do Conhecimento, Lisboa | 9 de Outubro de 2019

Douglas Baillie, PhD

Tamera Healing Biotope 1
Relíquias, Portugal



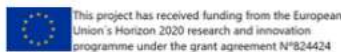
PROSEU
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This project has received funding from the European Union's Horizon 2020 research and innovation programme under the grant agreement N°756256.



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This project has received funding from the European Union's Horizon 2020 research and innovation programme under the grant agreement N°824424

BEACON Bridging European & Local Climate Action

CIÊNCIA VIVA

**PAVILHÃO DO
CONHECIMENTO**
CENTRO CIÊNCIA VIVA

TAMERA SOLAR TESTFIELD



Developing, testing and showcasing decentral modular solutions for regenerative human settlements

Community: The basis. Can people live on a basis of trust and cooperation with each other? This decides our path: regeneration or exploitation.

Then we can address the basic needs of humainty with the intention of regeneration:

- Water
- Food
- Energy





WATER: RECHARGE THE AQUIFERS!



Technology should not answer the question of falling water tables with deeper pumping capabilities.

Recharge aquifers with appropriate rainwater management.

Water first!



WATER RETENTION LANDSCAPES



2007



2011



FOOD:



Fossil fuel industry is the basis of existing food production, packaging and distribution, from pesticides to plastics.

If we speak of regenerative systems, we need to change this drastically.

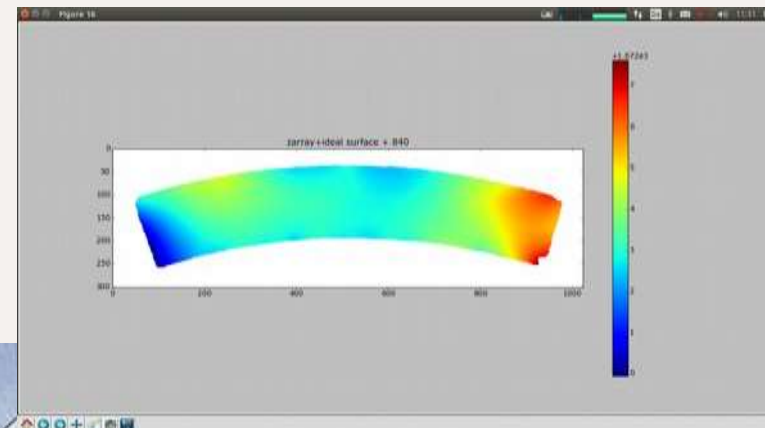


ENERGY: DIVERSITY OF ENERGY SOURCES





ENERGY: HIGH CONCENTRATION SOLAR MEMBRANE MIRROR





ENERGY: DIVERSITY OF ENERGY SOURCES

Our Experience of living with various energy modules

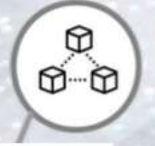
Direct sunlight for cooking, water heating, driving a Stirling engine.

Direct sunlight, highly concentrated for high temperatures: experimental metal and glasswork

Biogas, creating energy and fertiliser from kitchen waste – a perfect way to close cycles if done regeneratively. Use the energy for cooking, heating, electrical generation.

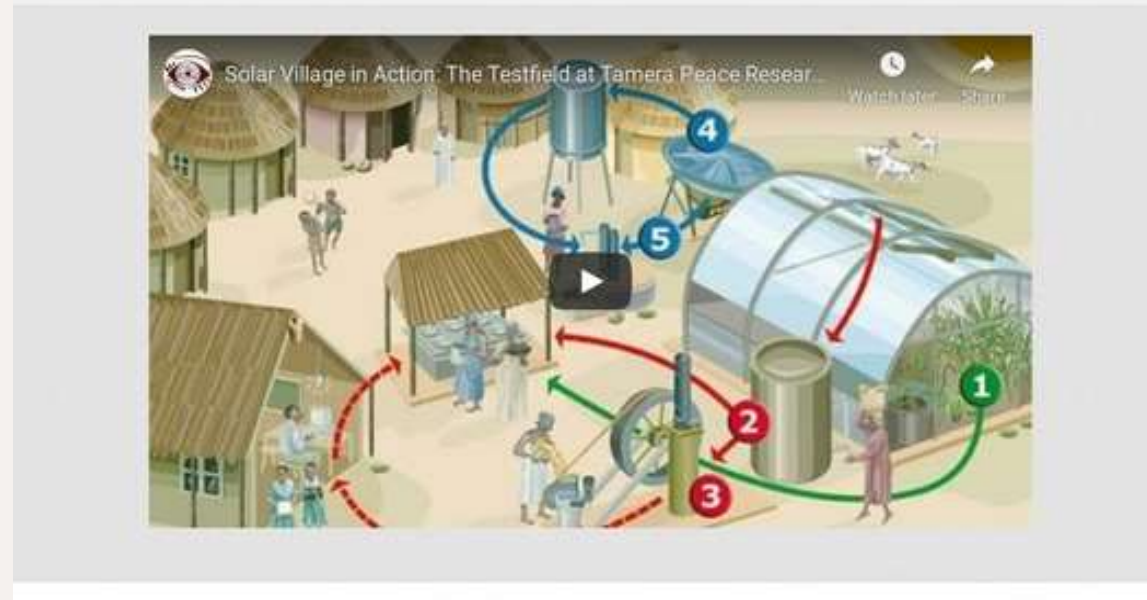
A Stirling engine as prime mover can transform the heat of the sun to mechanical (heating, cooling, electrical) energy. This shifts the burden of energy storage from electrical to thermal. Thermal energy can be stored cheaply using renewable materials. Our long-term cooperation partner Jürgen Kleinwächter has developed amazing systems on this principle.

We experience an abundance of energy.



MODULAR APPROACH TO CREATE A NEW SYSTEM

Solar Research and Development



Creating a way of life that we choose to live ourselves.

To become true role models for a regenerative lifestyle so that people living in crisis areas or the Global South do not get trapped in the lie of the Western lifestyle illusion.

The same cycles are addressed in rural and urban solutions.

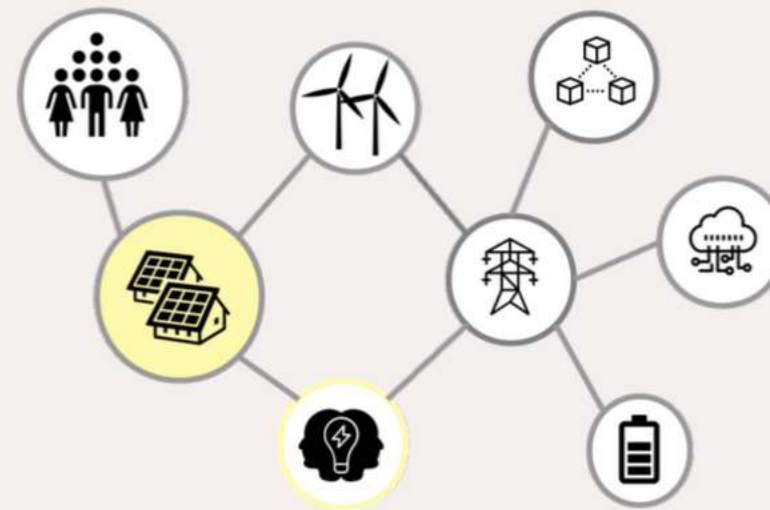


FORGET SUSTAINABLE DESIGN. IT IS TIME FOR REGENERATIVE DESIGN

“We can no longer afford the current practices of pursuing goals that simply reduce environmental impacts, nor can we continue to simply avoid reaching the theoretical limits of ecosystems’ carrying capacity. This practice is insufficient as a driving force for the required changes. This approach of reduction and curtailment has proven ineffectual as it is not motivational and does not, in principle, extend beyond the logical end-point of net zero impact. We need to inspire people to work to restore and regenerate the biosphere, sequester billions of tonnes of carbon dioxide from the atmosphere every year and seek out significantly more efficient uses of resources, especially non-renewables.”

Professor John Robinson of CIRC at the University of British Columbia

THANK YOU! ANY QUESTIONS?



Contact us for more information:

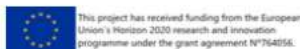
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 **www.tamera.org**



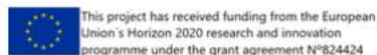
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