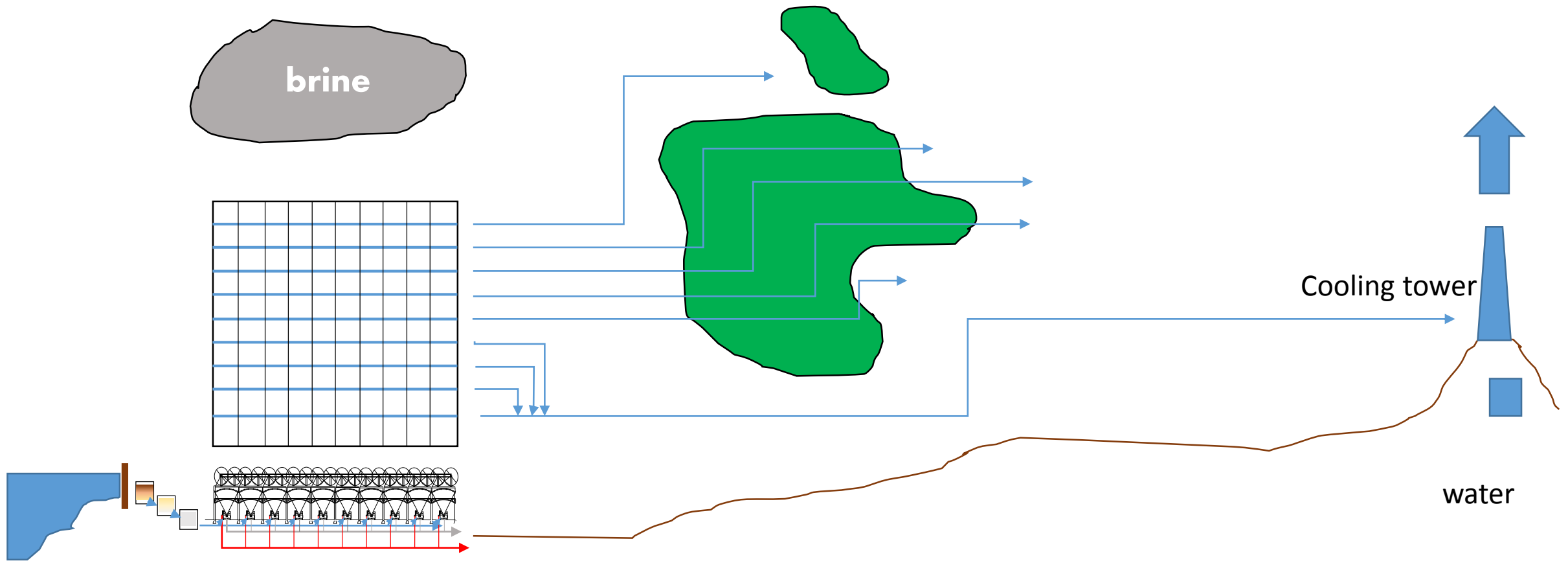


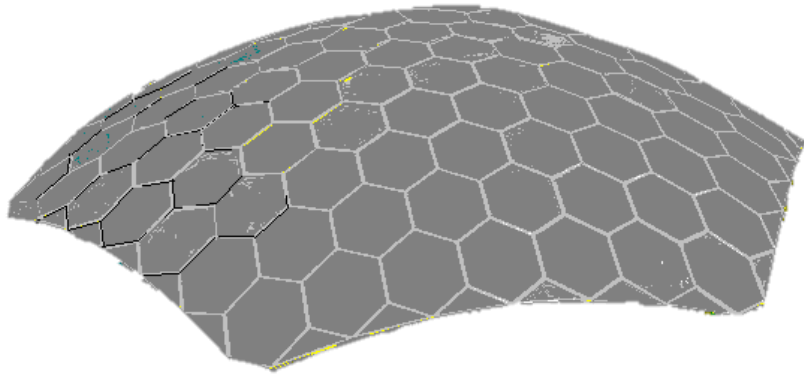


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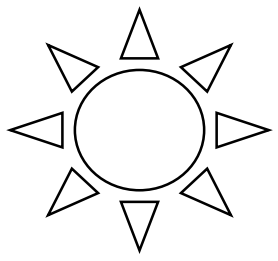


General scheme of desalination
in the desert

Our solution.

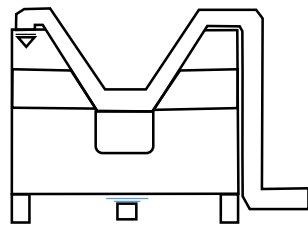
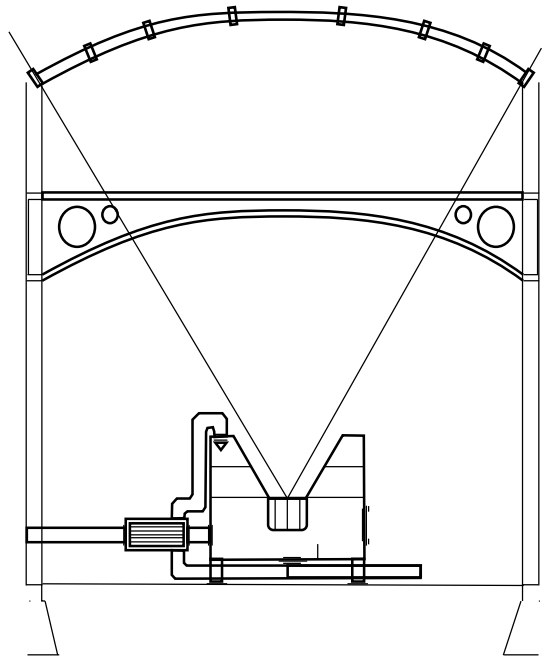
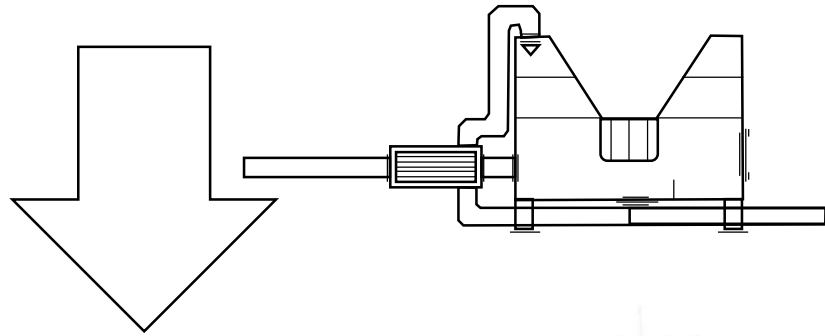


- Our idea is very simple, let's take a big lens and focus it in a pressure cooker, well we understand that it would not be so simple, because a traditional giant lens would be very thick, very heavy, very expensive, etc.
- With the idea as a starting point, we began to study the related issues, first types of lenses, and we decided that the best way would be thin, polycarbonate or CR-39 lenses that allow us, due to their high reflection, to attack the weight problem. , then we thought of a hexagonal arrangement coupled to a wide curve with a focal point at twice the distance used, to further lighten the total lens.

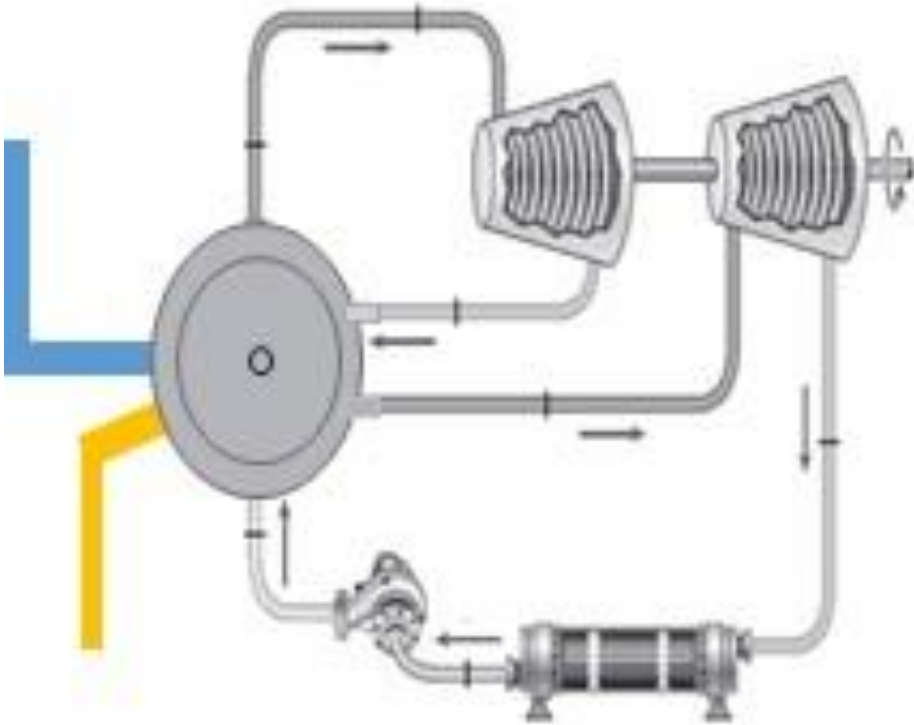


Our solution.

- The design of the boiler responds to the inverted cone logic as other similar projects have, but we corrected it by adding a large heatsink inside a wider cover with standards typical of boilers of this energy size 30 thermal kilowatts.

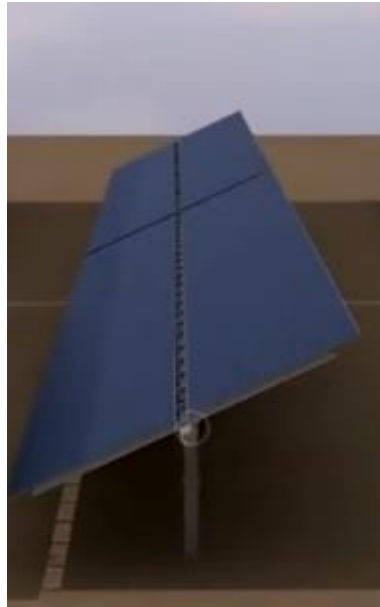
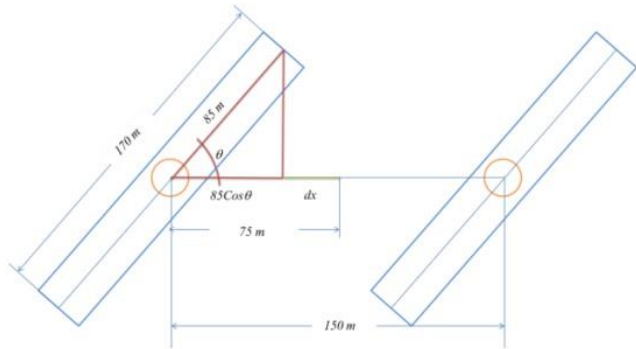
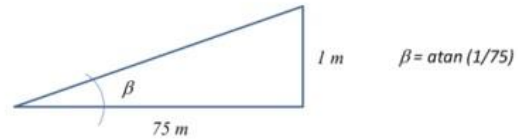
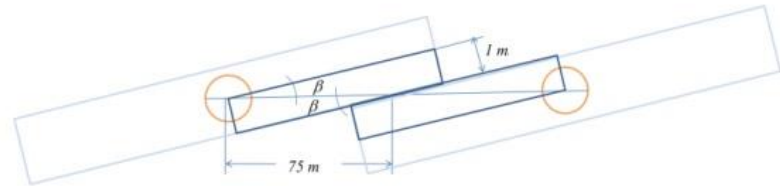


Our solution.



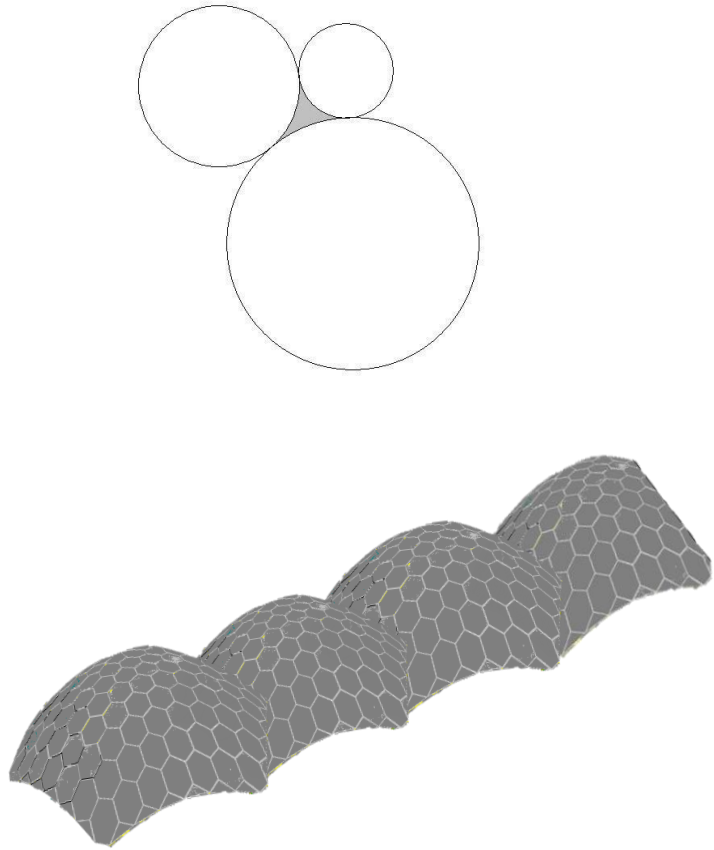
- The same boiler, but in a closed cycle, can be a very powerful electric generator, this would be governed by the design rules of boilers, which in many countries is even law. So to think that very advanced knowledge is needed for its operation, it is not like that, this is limited in many cases in a technical career.

Our solution.



- On top of all this, a group of elongated heliostats should be placed from side to side and with double movement according to the geographical coordinates.
- They must be joined optimizing the catchment area.

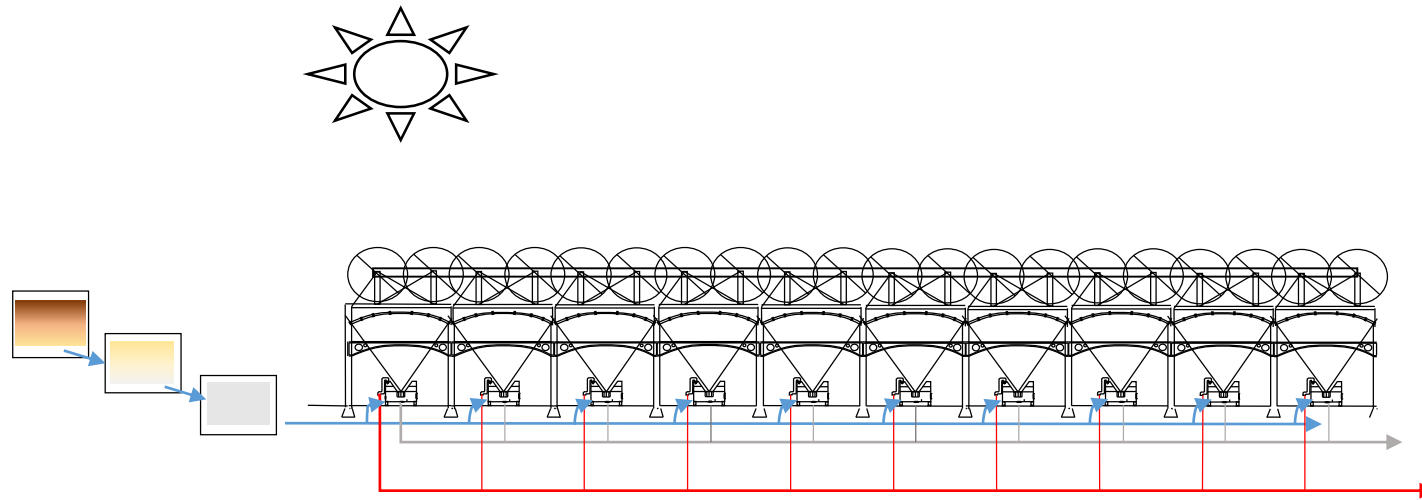
The problem of scalability.



- This problem occurs at various levels, from the chemical-physical production method with photovoltaic cells, which have a thermal limit; as well as geometric, at that point not only does the hexagonal arrangement allow a more extensive filling of the surface, but with a rectangular cut we can multiply the stroke multiple times, which is ideal for this case.

The problem of scalability.

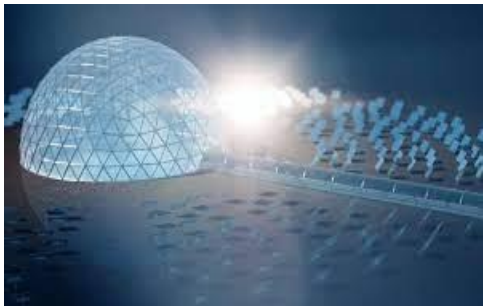
- This is where many projects die. For costs as basic as; terrain and modularization.
- When scaling any project it has to repeat certain parts, like the heat towers, a certain area must have only one.



Real-world evidence to validate key assumptions about industry needs



- Almeria, Spain; it is a perfect example of the point about the application of ideas like ours, where transparent structures are used in order to obtain resources, where water, energy are used.
- The increase in costs is such that today many companies are on the verge of bankruptcy, particularly in Europe, especially due to conflicts today.



Real-world evidence

- Real evidence that this project can be done here we can see different solutions already in process in a further advance, one of the other, where we validate our approaches and numbers correcting our perspectives.
- But the evidence of the needs of the industry can be:

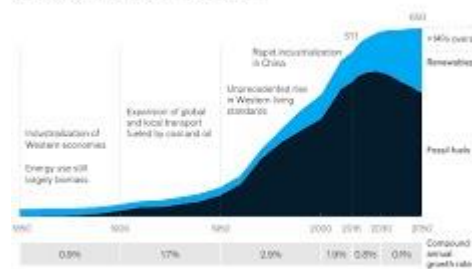
Real-world evidence to validate key assumptions about industry needs



- These conjectures are generally standardized as disclosure of uncertainty and risk.
- Although we think that we are on the right track, climate change reminds us that we are going very badly, and this includes the industry as well as society, for us the main tests are the climatic ones. And these should be taken as a starting point to recognize that the planet asks the industry to improve. Not just numbers.

After a century of rapid growth, energy demand is likely to plateau around 2030, primarily driven by the penetration of renewable energy sources into the energy mix.

Global primary energy demand, millions of tonnes



Source: McKinsey Energy Insights Global Perspectives, January 2019

Real-world evidence to validate key assumptions about industry needs

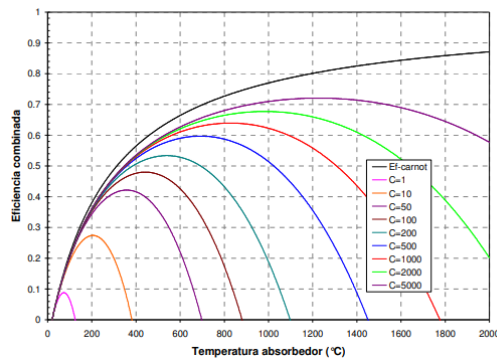


- But the best example we could find are these images, we think that with an inefficient system that only reaches 35%, to which we have to add waste due to spatial use or losses when reaching very high temperatures, which are more common day by day, We have solved the problem and it is not like that, we still have a long way to go and we must fix it in the best way.

Comprehensive understanding of the opportunity space. Justice, Equity, Diversity and Inclusion

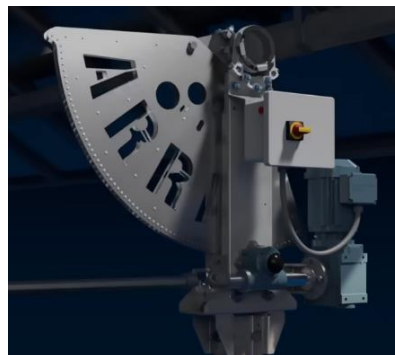
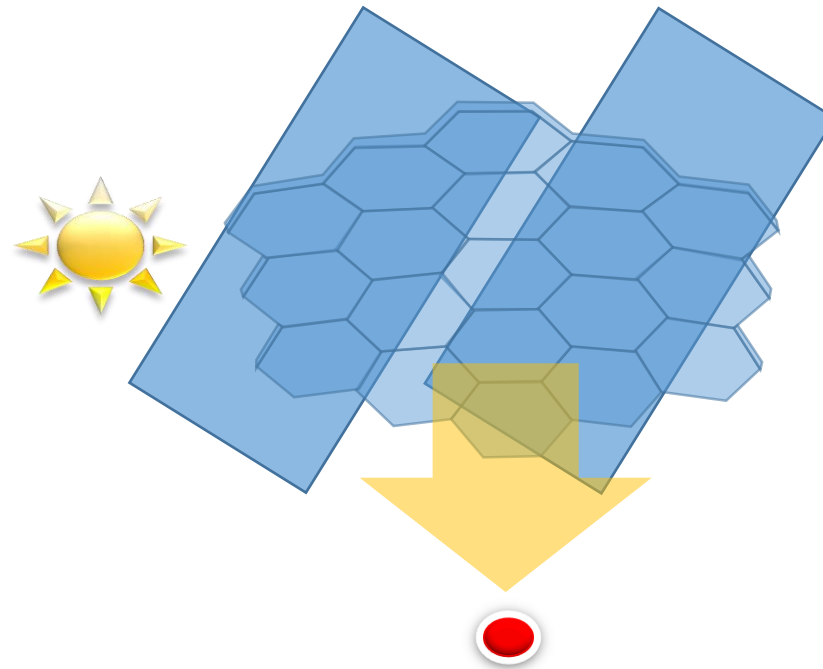


- Well, the main perspective of the project is an ecological one, where from the beginning it answered the simple question about the water needed to plant crops in the Sahara desert, how much water did we need? Where would we get it from? How would we distribute it? Etc.



- There we must already think about other things such as condensation, cooling towers, low-cost water transport, sustainable capitalization, obtaining biomass and all of this, although it leaves this project, it should not be alien.
- But when we enter the social issue, we think of the danger, because they put a gun to our head, but rather because someone with power can displace those who have nothing and appropriate something that in a short time can have value for the simple fact of bringing water to that place, we understand the value of this tool, but will our politicians understand it? Replicating nature in the water cycle and taking it where you want has incredible value for those who have nothing, justice would be to give them an opportunity, in an equitable way, being of Hispanic origin for us all this is clear.

For the system to work, it must have a series of heliostats that redirect the energy towards the main lenses and these in turn towards the focal point.



Electricity generation is a means that can be added to obtain green hydrogen from there.

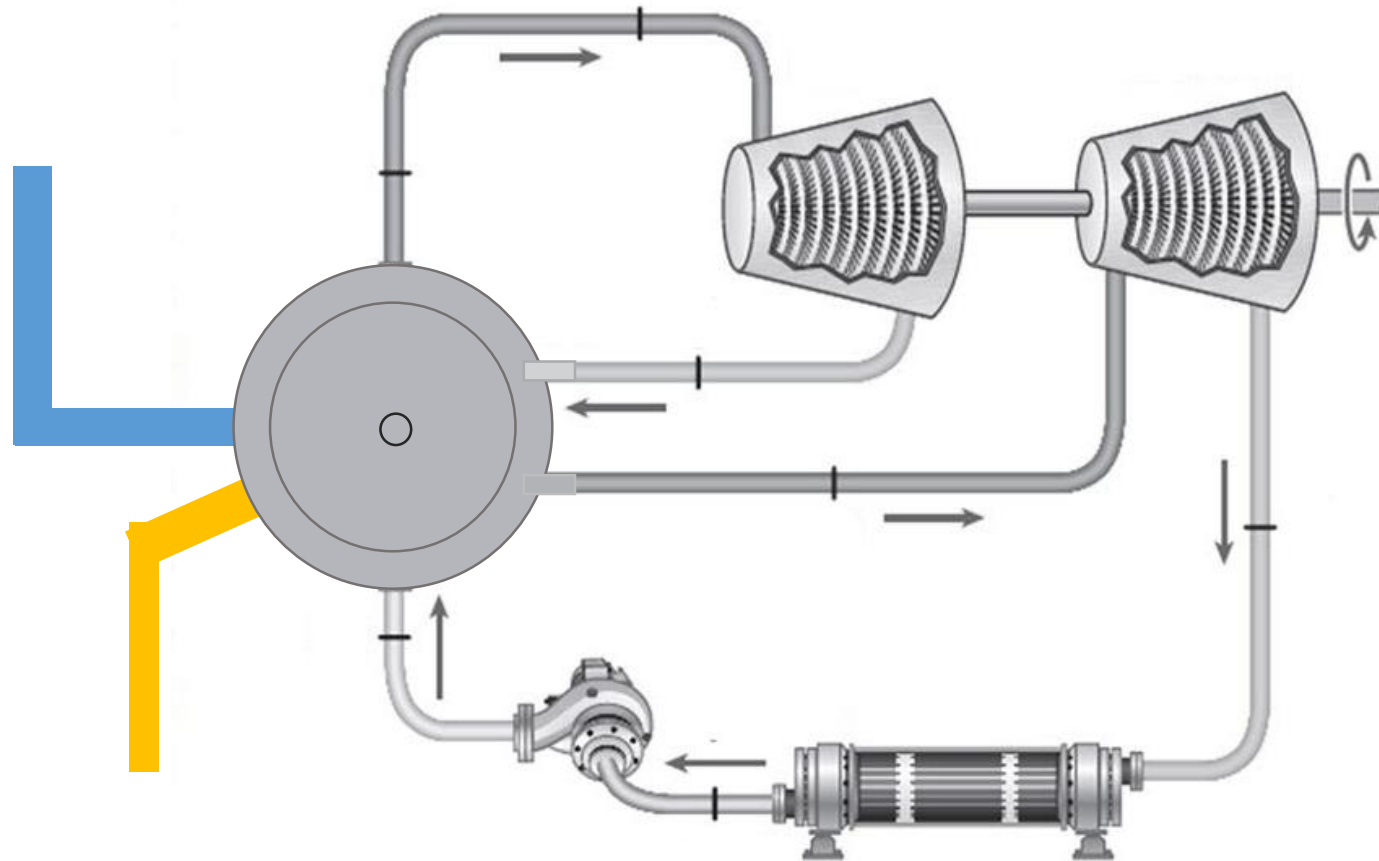
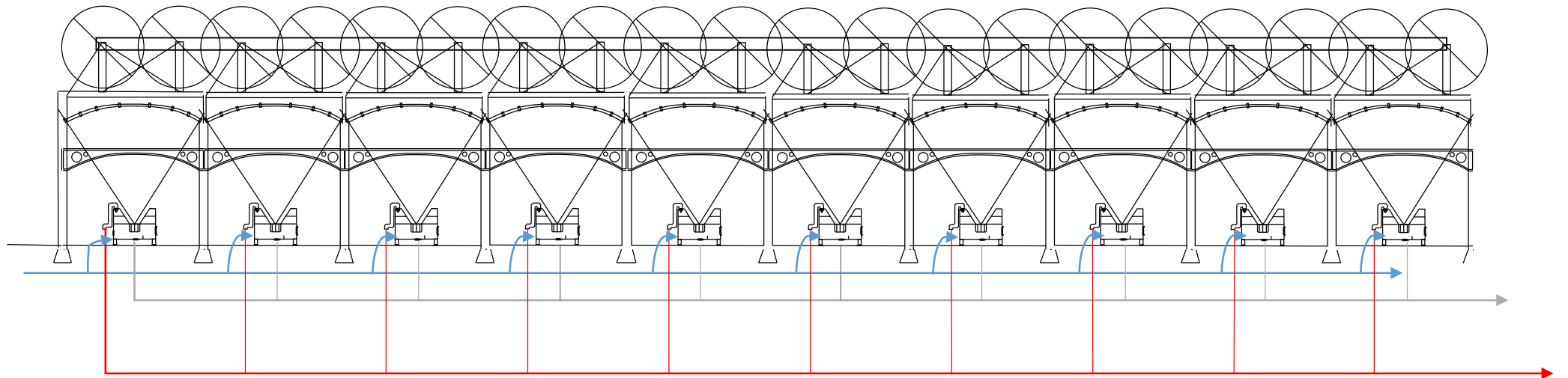


Diagram of heliostats, lenses, boilers and pipelines.





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