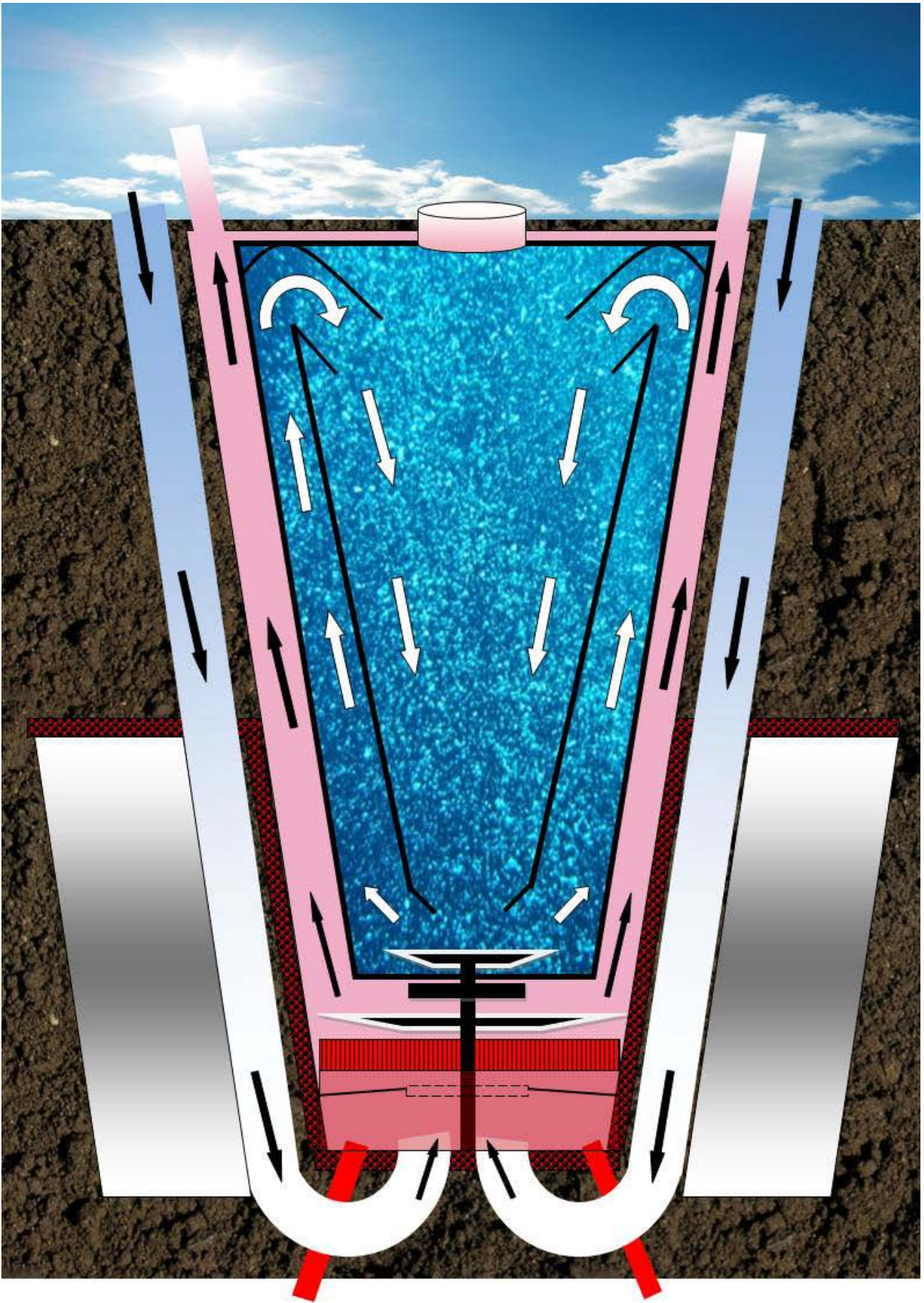


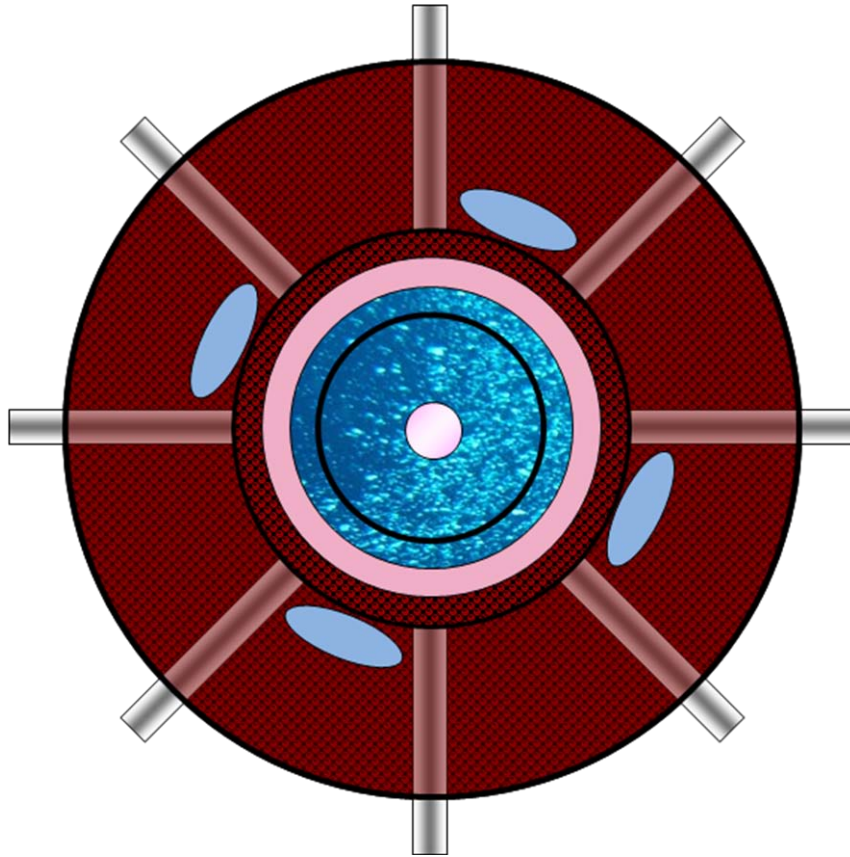
# The Water Tower

*H3*





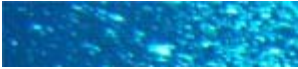
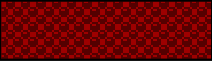


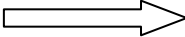
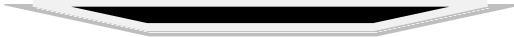


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# Overhead Cross Section



## Legend:

- Thermal Mixing Chamber 
- Warm Air 
- Endothermic Reaction Chamber 
- Cool Air from the Surface 
- Water Chamber 
- Lower 150 Insulation 
- Lower 150 Insulation  
Ground Heat Separators 
- Airflow Indicators 
- Waterflow Indicators 
- Fans 
- Geothermal Heat Shafts 
- Heat Release 

## Introduction

The three MAIN elements are that this is the first so called “alternative” that is useable as a base load generator (useable 24/7), and this will beat coal and natural gas in the marketplace; cheaper to build and cheaper to run. The third main element is going to be beyond anybody’s ability to believe right now and it is overviewed in the section on commercialisation: The coal, oil and natural gas corporations are going to be 100% behind the ubiquitous adoption of the Water Tower; they will be behind it because they will make more money if they are (and they DO NOT get a share of the commercialising entity).

## The Main Elements

You need to have a basic understanding of fluid dynamics, thermal currents specifically, and you need a basic understanding of geothermal gradients to realize that this will work. In other words you need to know that hot air rises and cold air sinks and that the deeper you go under the surface of the earth the hotter it gets. You need nothing else to tell you this will work. To understand specifically how well this will work you will need an engineer’s understanding of these things and you need to have an understanding of the strength and thermal conductivity of building materials. You need nothing else to tell you how well this works. If you have this knowledge you should be able to see this almost instantly.

1. The shape is a conical frustum or truncated cone, a very long one.
2. The Water Tower is 400 to 500 metres deep and up to 25 metres in diameter at the top.
3. The heat comes from the earth surrounding the Water Tower, and from the earth about 500 metres further down than the bottom of the Water Tower via heat shafts. The deep heat shafts may not be needed.
4. The airflow is drawn from fully insulated air intake shafts that draw most of the air down from the surface.
5. The air from the surface becomes heated as it enters the Thermal Mixing Chamber at the bottom of the Water Tower and continues to be heated as it rises.
6. The constant warm air in the collar shaped air tunnel transmits heat into the water chamber.
7. The water chamber has a long outer collar shaped tunnel and a standard tunnel shape inside. The water will flow up the outer tunnel and down the inner tunnel. The separator between the two tunnels inside the water chamber is insulated so that the water inside the standard tunnel can continue to cool as it is drawn down to once again be pushed up through the outer tunnel where it is again warmed.
8. Both the air and water collar shaped tunnels become narrower to concentrate the flow and subsequently provide more energy.
9. With an eye on vortices and maintaining the most efficient flow rates (both air and water), we place energy turbines liberally throughout the system. We place them throughout the water chamber and at every point where there is airflow, from the air intake shafts to the end of the cycle where it is expelled.
10. The last main element (for the time being) is something called the Lower 150 Insulation. The bottom one hundred metres of the Water Tower will be surrounded by insulation materials to prevent the heat from being drained from the surrounding earth. About one quarter of this insulation will be opened at a time to allow for the heat to make its way into the Water Tower. This element will be

designed to ensure a constant supply of heat from the surrounding earth whilst providing plenty of time for the heat to replenish.

There are a few elements of the system to emphasize here: A larger body of water down the centre of the water chamber will cool down more quickly. The fans at the bottom of the Water Tower are magnetically connected and as the hot air rising causes the air fan to turn at a great rate, this will turn the water fan, which will then drive the water up the outer water tunnel with more force than it otherwise would without the fan. Correct positioning of the surface air vents will increase the speed and volume of airflow down the air intakes.

## The Options

In literal terms the Water Tower is only about three-quarters of the way to being as good as it can be and there will be several other options and additions by the time we get to the first installation. I have developed a lot of technology and so I can tell that this has plenty of development to go before it gets to as good as it can be. These are the main additions possible at the moment.

1. There is an Endothermic Reaction Chamber that can be added at the bottom for little cost. Some form of decaying biomass is the most common reaction we could use. Even if there was no heat coming from the surrounding earth or under it then we could use an Endothermic Reaction Chamber to provide all the heat. In regards to efficiency and being competitive with coal, this will put coal at an even greater disadvantage. Of course to add the ERC is to add a consumables requirement so it is an option that utilities may decide against if they can get away without it. The smaller the power plant the more likely it will be preferred and it is only a very low cost consumables requirement, negligible in fact.
2. The water chamber inside the Water Tower may be completely enclosed or it may be partially open at the top. There are advantages to both and if it is completely enclosed additional elements to regulate the flow will be required. If it is completely enclosed the water is going to get very hot, much hotter than the surrounding earth, and the Lower 150 Insulation would not be required.
3. Putting the water under enormous pressure could put a lot more force behind the flow. There are trade-offs and we need to investigate this as an option.
4. Another design option is to almost completely enclose the air chamber of the Water Tower. The air intakes would be much smaller and most of the air would circulate like the water rather than being expelled. There would be a fundamental internal design alteration if this option were used.

All of these options and more is what will facilitate its scalability downwards, albeit inside some very big numbers. My preliminary estimate is that it is scalable from about 200 megawatts commercially, up to 2000, 20,000 gigawatts theoretically. Obviously we are unlikely to build a Water Tower any larger than about five gigawatts in the foreseeable future although we might. The Water Tower will be able to beat coal from about 500 megawatts, and the bigger the power plant gets the further coal falls behind.

# Commercialisation

To simply say that the commercialisation strategy for this is unique is to underplay it; nobody has ever commercialised a thing the way this will be commercialised. It is important to understand that I'm not seeking after the money to build a prototype (a normal first step). It is physically massive technology so unless one is already a massive corporation such a step is unrealistic.

The Water Tower will be commercialised in such a way so that even the coal, oil and natural gas companies will be 100% behind the ubiquitous adoption of the Water Tower and its bigger brothers. H3 will put fossil fuels companies out of the energy generation business but they will want this to happen and they will get behind it because they will make more money if they do, and NOT because they get a slice of the technology.

This technology comes with global economic reforms that will give the fossil fuels companies more than twice what they will be giving up in related commerce, in real terms and in real commerce (Hard Assets). So NOT something like the phony ETS commerce where we rob Peter to pay Paul, and NOT money pushing other money around. This is the sort of thing that is required in order to move us past fossil fuels. Anything less than giving them more than what they will be giving up and it will not matter how good your technology is.

The main commercialisation strategy is going to remain confidential until it is done. What I can relate in this document is the effect of it, and the fact that it is tailored specifically for a corporation with new dominating energy technology.

The entity that will be created to commercialise the Water Tower and other "alternative" energy technologies developed inside H3 operations will be standard faire. We will get the best CEO we can find and we will trust her or him to do the job. The commercialising entity will be called Natural Selection and it will be a public company.

The effect of the main commercialisation strategy is this: Natural Selection will start its public life with over \$300 billion worth of projects on its books, probably even more than \$500 billion, and it will end its first day as a public company, on the BSE or the SSE, as one of the largest corporations in the world by market cap. There will only be a very small public float available (the bare minimum), and it will be offered at a massive discount. No public offering ever conducted by H3 will be about squeezing every last dollar out of the public, quite the opposite.

This is new dominating technology that will absolutely have the blessing of the fossil fuel industry, and it cannot be stressed enough that this is not a debatable point. Yes this is a massive prediction but this will be the size of a company if it has dominating technology in this industry AND the blessing of the fossil fuel industry. That is what this is. The technology behind this operation is big, the global reforms are bigger, much bigger.