

AQUA-THEATRE *RECREATIVE. INTERACTIVE.*

THE PROPOSAL UTILIZES HEAT FLOW IN GEOTHERMAL POWER PLANT NOT ONLY TO PRODUCE ENERGY, BUT ALSO TO CREATE A PUBLIC AQUA-THEATRE THAT ENGAGES PEOPLE IN THE CREATION OF PUBLIC ART WHILE PROVIDING A RECREATIONAL DESTINATION.

ENERGY OF THE NEAR FUTURE

IN DENMARK, THERE ARE CURRENTLY THREE OPERATIONAL GEOTHERMAL PLANTS. THE EXISTING COPENHAGEN PLANT STARTED PRODUCTION IN 2005. THE PLANT IS INTENDED TO PRODUCE UP TO 14 MW HEAT FROM 253 M³/H OF 73 °C. HOWEVER, THERE ARE PLANS TO ERECT MORE GEOTHERMAL PLANTS IN COPENHAGEN. ACCORDING TO THE EUROPEAN GEOTHERMAL CONGRESS 2013 IN PISA, ITALY, PRELIMINARY PLANS WERE OUTLINED TO ERECT A GEOTHERMAL PLANT IN COPENHAGEN WITH GEOTHERMAL HEATING CAPACITY OF 200MW AND UP TO 400 MW BY 2050. THIS CREATES AN OPPORTUNITY TO DRAW PEOPLE'S ATTENTION TO GEOTHERMAL ENERGY AND ITS HUGE POTENTIAL AS A RENEWABLE RESOURCE FOR THE PEOPLE OF DENMARK.

ALL-YEAR-LONG BATHING SEASON

HARBOR BATHS ARE VERY POPULAR AMONG THE RESIDENTS, EVEN IN COLD, SUB-ZERO WINTERS. OUR PROPOSAL IS INTENDED TO COMPLIMENT THE FOUR HARBOR BATHS OF COPENHAGEN, EXTENDING THE SWIMMING SEASON, WHICH IS TYPICALLY FROM JUNE-AUGUST, TO THE WINTER MONTHS. THE BATH IS FED BY CLEAN WATER FROM THE HARBOR. THE GEOTHERMAL POWER PLANT, WHICH LIVES UNDER THE BATH, EXTRACTS SUPER-HEATED FLUID FROM THE GROUND. PART OF THE FLUID TRAVELS IN PIPES THAT HEAT THE WATER OF THE BATH, WHILE THE OTHER PART PASSES THROUGH TURBINES AND HEAT EXCHANGERS TO GENERATE ELECTRICITY FOR THE GRID, AND TO PROVIDE HEAT FOR BUILDINGS.

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THIS INCLINED (1.5 M DEEPEST POINT) BASIN PERFORMS AS PUBLIC SPACE FOR RECREATION AND INTERACTIVE PUBLIC ART. A LARGE SCREEN OF STEAM PROVIDES A SURFACE FOR PROJECTIONS AT NIGHT, AND RELEASES CLOUDS OF STEAM DURING THE DAY. LUMINESCENT POUFS ARE PROVIDED AS THEATER SEATING ON THE INCLINED SURFACE OF THE BASIN, AND THEY FUNCTION AS A SENSOR DEVICES OF HUMAN PRESENCE. PROJECTIONS ON THE STEAM SCREEN REPRESENT THE MOVEMENT OF PEOPLE ON THE POUFS, CREATING AN EVER-CHANGING COLORFUL LIGHT PERFORMANCE THAT CAN BE SEEN FROM THE OPPOSITE SIDE OF THE HARBOR. ON OTHER OCCASION, FILM PROJECTIONS ON THE STEAM SCREEN WILL CONVERT THE SPACE INTO AN OUTDOOR CINEMA.

