***The Spectrum***

Throughout this year, our environment has been suffering as a result of the increasing demand for travel after COVID-19 pandemic has passed. Germany has gone through a rough patch with wildfires and overall dryness.

Finding a solid realizable solution to the overwhelming cause of the environmental crisis at this moment is very fundamental, therefore the next step was to search for a technological solution that is easy to install maintain, and produces the most amount of energy while at the same time cater to the site and surrounding at hand, as well as help in the reduction of global house warming.

This is where The Eco-Spectrum site solution comes in handy, the main concept revolves around the engagement of people along with harvesting solar power, and yes it was easy to reach out for solar photovoltaics, yet it was difficulty finding a solution that would increase solar harvesting, in the end, harvesting infrared was a simple possibility, using a Nano-photonic Radiative Panel, and from that note, we are able to harvest solar power in addition to the heat emitted by earth at night. As well as rain water harvesting and kinetic energy from a combination of german people to bike a creating a path to harvest kinetic heat energy.

Taking the concept in relation to Mannheim and their production of vehicles we took speed, drift, and motions of cars as a concept to the structure as well as the technology used. Therefore the structure moves from 35% degrees to a flat structure to maximize the collection of heat during the night.

The structure spreads as well to view over some areas aside from the bridge built beneath the solar energy form.

And during the night the structure lights up adding a different view to the park throughout the day.

Our initial perspective is to create a space where people can learn, have fun and walk with fitness in mind. Therefore the original idea for the old building is to turn it into a solar energy factory.

Learn about sustainability together. the engagement of people and raising awareness of global warming and the importance of renewable energy is an ever-lasting problem.

***Costs of main systems:***

1. ***Solar Photovoltaic*** = ***128,054.78***MWH/ Yearly

Made out of a CdTe-Based Thin Film Solar Cells while being double sided with a Nano-photonic Radiative Panel all combined with META nano technology to increase efficiency by 15% as material is available in mass and cheap costs.

# Costs 118,584.54m2 \* 85 euro = 10,079,686 euros

1. ***Kenitic energy*** = ***252***MWH/ Yearly

Made out of a CdTe-Based Thin Film Solar Cells while being double sided with a Nano-photonic Radiative Panel all combined with META nano technology to increase efficiency by 15% as material is available in mass and cheap costs.

# Costs 3600m2 \* 120 euro = 430,000 euros