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| LAGI 2022 Mannheim Partner |
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| Circle of life |  |

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| In the name of God |
| IntroductionThe initial idea came from a place where equality and respect for nature played an important role for me.Therefore, I implemented this idea in such a way that both nature, people and technology use it equally.Its name is the circle of life because life flows in between it and the above three elements (nature, technology, human) make it a circle to continue life.Environmental effectsSimultaneously with the production of electric energy, trees and plants grow without damage, the circle of life grows trees within itself to defend the environmental conditions in the best possible way. Also, the slight slope that the solar panel has towards its empty space directs the rainwater to a certain point for the growth of trees and also provides us with a shelter to avoid getting wet with rainwater. |  |
| Social situationSpace creations that can be done using this structure bring people together. On the days when the sun bothers people with a lot of radiation, they gather under the circle of life to enjoy the shade and rest next to it and continue living there.Sustainable Development GoalsWhen the three elements of man, nature and technology can continue to live together with respect; A healthier life can be predicted for the people of that society.Seeing nature and enjoying it, and at the same time, social relations that arise in the same place and the sun that makes life more dynamic.The amount of electricity produced from this idea after a period of time gives a good economic growth to the country or that city and improves the well-being of people's lives.Keep thinking about the growth of trees and plants during this time...So, for some time, a stable nature will be created and it can even be fruit gardens.The amount of electricity producedAccording to the fact that every 1 square meter gives us 1000 watts:* Solar Panel PV: 473.1540 **m2** 🡪 473,154 watt
* 20% Efficiency Assumed Based On LAGI Field Guide Document, 3D Solar Cell 🡪 94,630.8 w(p)
* If we put 200 of these structures and solar panels on the site (more solar panels can be placed): 94,630.8 w(p) x 200 = 18,926,160 W(p)
* After conversion to KW(p) is: 18,926.16 kW(p)
* If about 50% of the stored electricity is used for lighting at night:

Total KW(p) = 9,463.08 kW(p)* One Day KWh: **236,577 m2** (The useful surface of the solar panel) x **0.20** (Efficiency) x **6.2** (Peak Sun Hours) x **0.75** (Effective Output % After Deducting Losses) = 220,016.61kWh/day
* Annual kWh = 220,016.61 kWh/day x 365 = 80,306,062.65 kWh/year = 80306.06265 MWh/year
* Now, if the number of solar panels is increased or decreased from 500, this amount is different; For example, 100 solar panels produce much less than 500 solar panels.
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