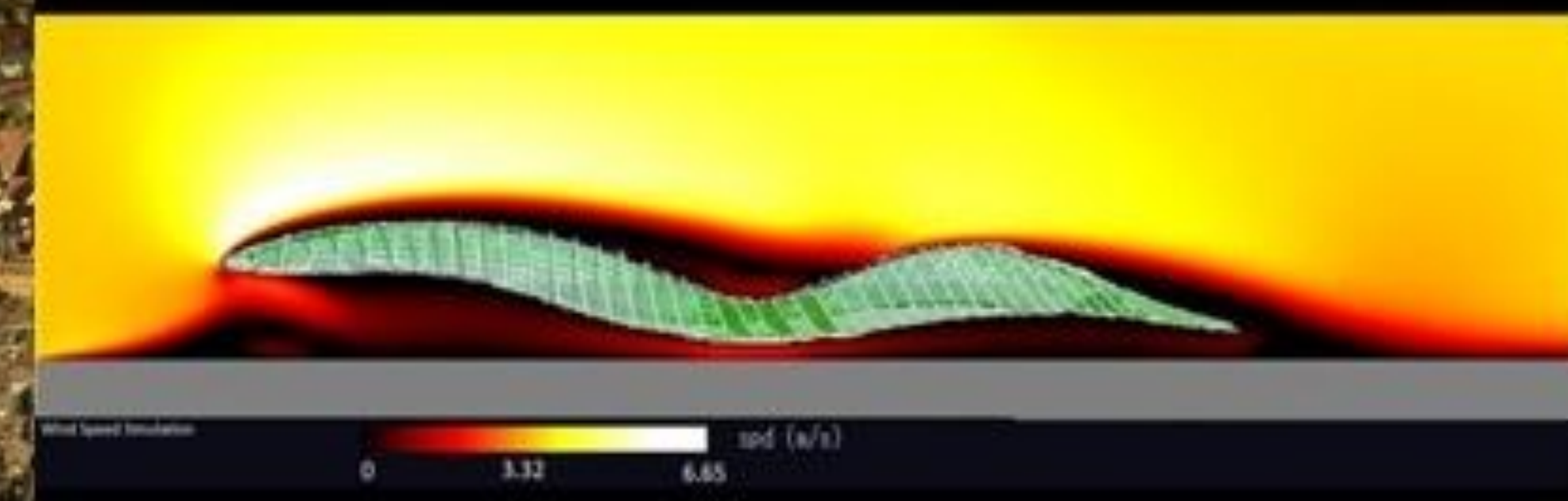


- The main and secondary stainless steel structures are strategically located so that they face the prevailing wind direction (East-West direction)
- As can be seen from the wind analysis, the structure wouldn't bring a significant alteration to the natural wind flow in the park, so it would be consistent with the Baden-Württemberg climate adaptation plan and the Klimopass.
- The wind would also run across the structure under the coverage surface, providing a comfortable environment both for people and plants
- The increased wind speed on the top of the surface would decrease the air temperature, increasing the PV efficiency. This can be considered as a clean and useful solution to enhance the performance of the energy system



#### SMART IRRIGATION SYSTEM

- The smart irrigation system would use remote sensors connected to the distribution devices in order to feed the crops in an intelligent way avoiding water wastes and increasing efficiency.
- The sensors are driven by wi-fi routers powered by the soil-based MFC placed under the structure, fed by the organic waste provided by the citizens.
- The distribution devices are placed inside the main and secondary structures and provide water as drip irrigation. For the crops outside, the devices are placed on the structure of the vertical LSC modules.
- The water used to feed the crops is the one collected by the same structure and stored in proper tanks.

**Pathways**

**Main Structure**

**Secondary structures**

**Vertical LSC**

**Thin Film Solar Cells + TLSC**

