

Project Statement

As a work of architecture, the beauty of this design lies in its elegant incorporation of technology – a series of triangular pathway tiles connected to triangular façade tiles. One pathway tile is linked to one façade tile using sensors. The pressure from a footstep causing a pathway tile to light up, will cause its associated triangular façade tile to illuminate as well. Design flexibility is another key feature – the pathways can be arranged in any way to minimize wildlife disturbance or maximize visitor interactivity, for example. San Jose residents and tourists alike are invited to go on casual walks along these pathways, enjoy unique foods at nearby restaurants and admire Silicon Valley’s past, present and future inside the Persis Dome.

In addition to its elegance and simplicity, this project effectively incorporates net-zero energy components into the design primarily through human and vehicle movement (kinetic energy) converted into electricity, and partially through solar panels proposed to be installed on the East side of Arena Green Park. The Pavegen® pathway tiles can generate 5 watts of energy per footstep, enough to light up the LEDs of one pathway tile and one façade tile. The remaining energy requirements can be fulfilled via solar panels and Innowattech® piezoelectric energy harvesting technologies, which can be quickly installed on top of the existing Highway 87 roadwork. Multiple methods of energy generation reduce the probability of any load-shedding and successfully implementing these new technologies will establish Silicon Valley as a pioneer in clean energy research. Further, with the hope to minimize disturbance to the nature and wildlife on-site, the trees requiring removal to make space for the main structure and pathways of the project are proposed to be relocated along the Guadalupe River. This will create a thicker natural barrier between the river’s wildlife and the project’s lighting as well as increased human activity around the project’s main spherical structure.

Finally, through exhibitions on three levels inside the Persis Dome, tourists can learn more about Silicon Valley's vibrant history as well as its technologically rich and hopeful future. While the outdoor pathways are accessible to all, these exhibitions and the viewing platform on the fourth level can be accessed by paying a nominal entrance fee, one way to generate economic activity. Additionally, tourist shops of any kind can open in the surrounding plazas - unique restaurants, souvenir shops and apparel stores are but a few suggestions.