

## SOLAR EV CHARGING STATION



Electric vehicles are the mode of transportation of the future. Since people have become more environmentally conscious, there has been a significant push. That being said we need to have alternative charging methods so that EVs can be charged with ease. The combination of solar energy and EV charging is critical to drastically reducing our reliance on fossil fuels. Electricity is generated from various sources, and electric vehicles must be powered by renewables. Electric vehicles are becoming increasingly popular, and we anticipate that in the coming years, nearly everyone who owns an Electric vehicle system will install a solar charging station in their home. This will necessitate a fundamental shift in how we think about refuelling our cars, as well as a natural evolution of our energy infrastructure.

### Table of Contents Types of Solar charging stations

- 1) On-grid solar charging station A grid-connected solar energy system is the simplest way to charge your electric car with solar energy. A grid-connected solar energy system will feed power to the grid whether or not your home requires it at the time. So, while you are at work and your solar energy system is feeding into the grid, the electricity generated at home is sold to the utility company. That power will be returned to you by the utility company in the form of credit. When you get home from work and park your car, you can use that credit to recharge your car.
- 2) Off-grid solar charging station An “Electric Vehicle Autonomous Renewable Charger” is another name for an off-grid electrical car charger. There is no need for a connection to local utilities. The solar panel array will feed the battery energy storage system, which will provide all of the power required. Because there is no need for an electrical grid connection, off-grid electrical car chargers can be installed almost anywhere. Because the independent solar array canopy catches a lot of wind, a solid foundation is required.