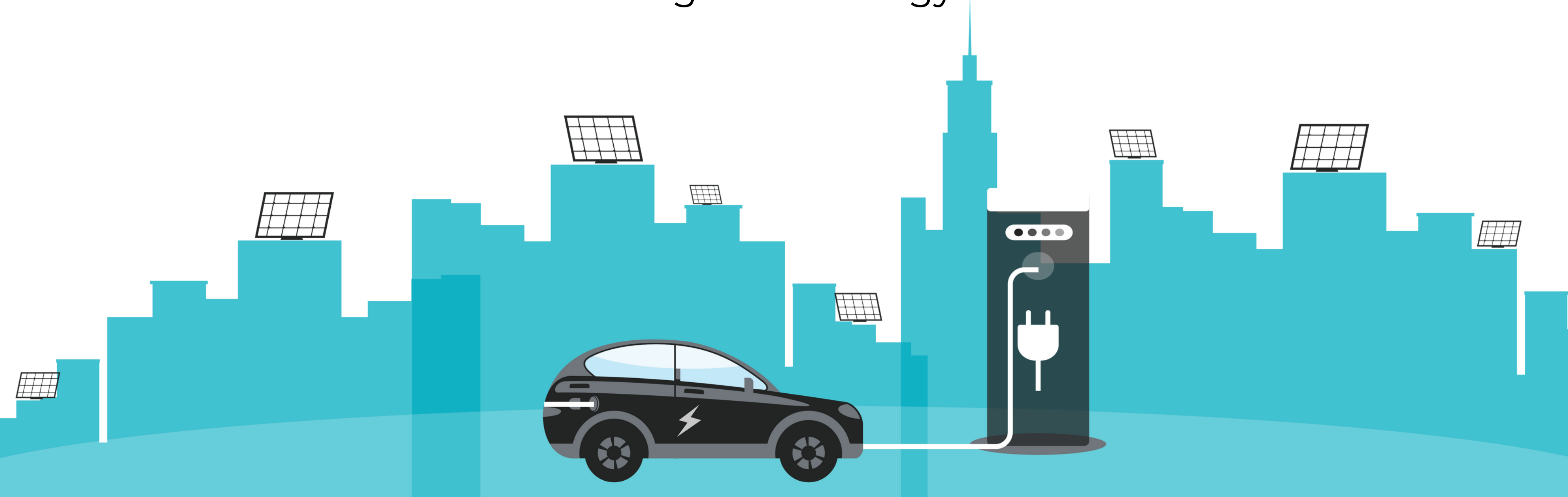




SkyBless

Unlocking clean energy value



About Us

We deliver clean energy solutions and services to Urban Buildings. Our vision is to generate maximum clean energy, to not only power the common utilities but to also cater to the future energy demand of electric mobility.

Managed
Rooftop
Solar

Electronic
Vehicle
Charging

Shared,
electric
micro-
mobility

Energy
Storage

Founding Team



Heramb Ranade

Founder, Director, CEO
BE, ISB,
ex co-founder of Tikona



Rahul Sankhe

Investor-Mentor, non-ex
Director IITB, M.S, ISB
co-founder, Sensehawk

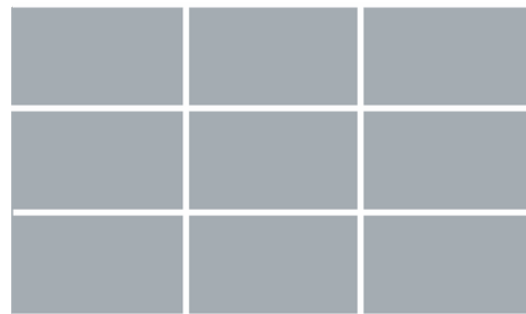


Vignesh N

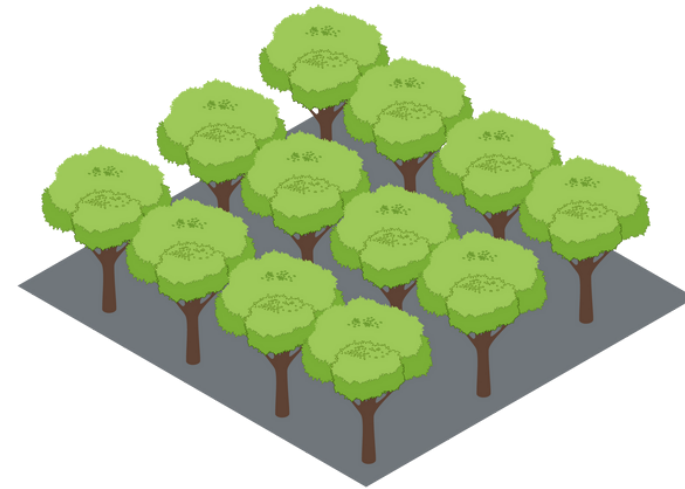
Angel Investor,
IITM, M.S, ISB,
Strategic Advisor



Unlock the benefits of *clean energy* with roof top solar!



=



**EVERY 20 KW
SOLAR**

1400 TREES

25 TONNES OF CO2 EMISSIONS AVOIDED EVERY YEAR!

Solar capex paid back in \approx *Four years*. Enjoy free clean energy for the next 15 years to *run lifts, pumps and EV charging*.



good for **e** environment
economics

Conventional solar

Indian solar supply eco-system is dominated by ground mount or conventional solar installers. Most Roof Top Solar Projects are getting executed with the design approach and toolkit used for conventional solar. As a result the performance is sub-optimal.

Roof top solar

Limited space, presence of shade creating structures, high wind loads, non-uniform shapes and sizes of areas available for module installation, require roof top solar to be designed differently than conventional solar.

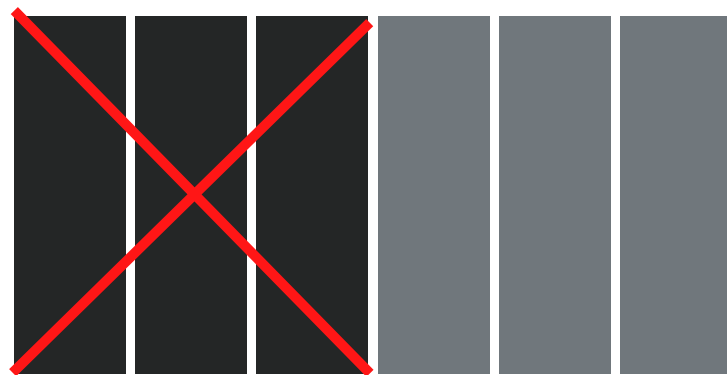
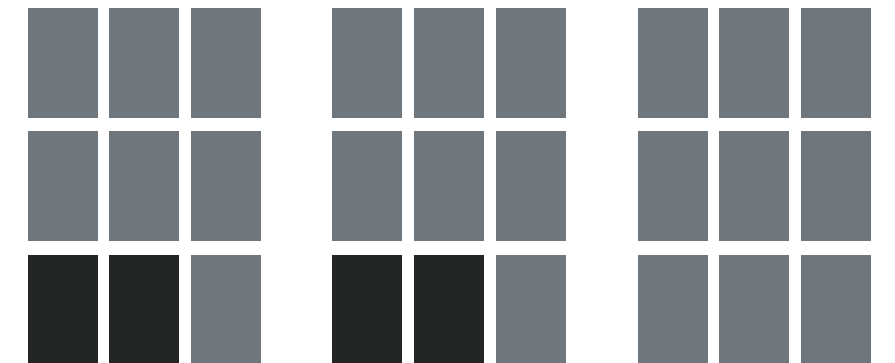
Why rooftop solar needs special design?

1

Shading

Inefficient and Risky if untreated

Tanks, parapet walls, nearby high rises cause shading on roof tops. Use of basic modules is sub-optimal and risky if shading persists through the day. Shade tolerant modules are essential to ensure full system life.



2

Limited Space

Less Generation

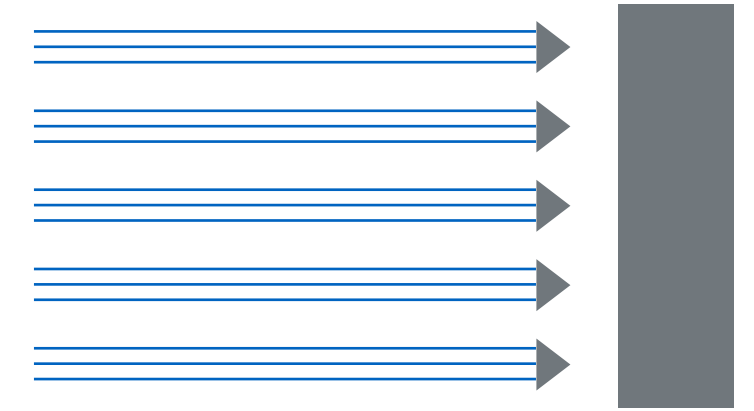
Limited shade free space, demands use of mono or PERC modules with high watts/ sq.ft, which cost more than basic modules used in ground mount. The high power modules still deliver higher net savings in-spite of higher CAPEX.

3

Airflow blocked

Increases temperature, reduces generation

- Parapet walls block air-flow which increases the module temperature thereby reducing the generation.
- This requires modules to be mounted at appropriate height to allow for air-flow. Usually modules are nearly flushed to the floor to reduce cost. But this takes a toll on generation and savings.



4

No access for module cleaning

Poor Maintenance reduces life

- There is a tendency to build unwieldy and risky structures to create shade free space on roof tops, which remain inaccessible for regular cleaning of modules.
- Ill maintained modules result in generation loss and can lead to damages caused by hot spots.

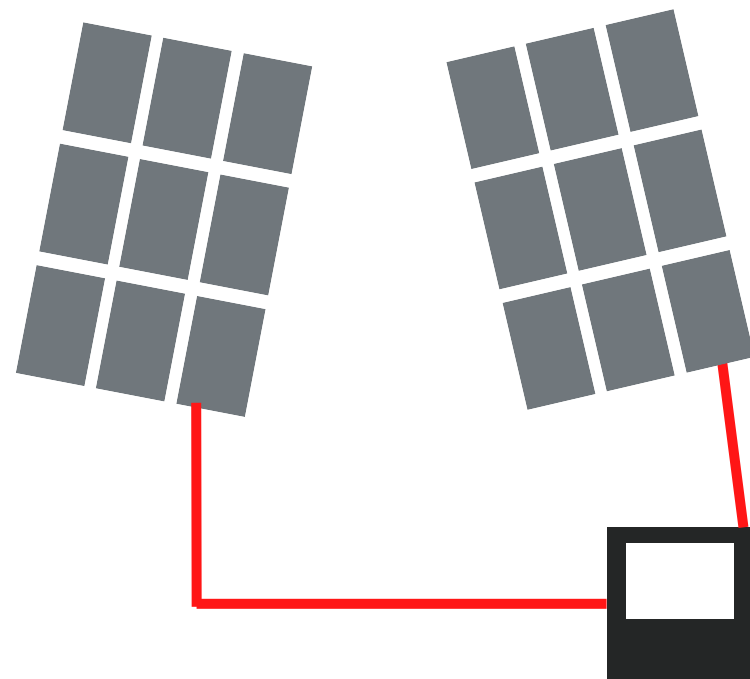


5

Thumb rules don't work

Mis-leads you on of generation and savings

- Ground mount systems can be designed with thumb rules for target generation. These thumb rules don't work for rooftop solar.
- Roof Top System Designs require use of proven simulation tools to correctly estimate generation.



6

Module placement

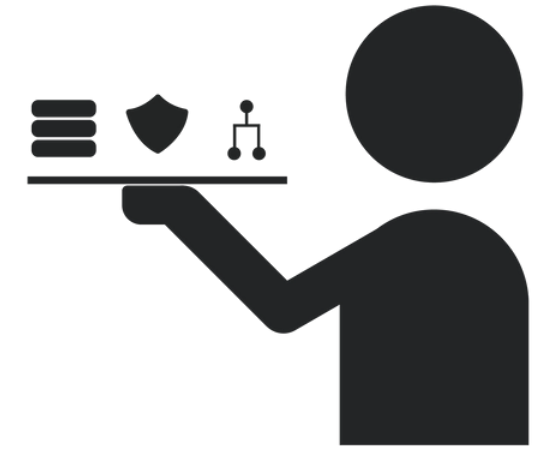
Impacts Generation

- The shade free spaces on roof tops are not necessarily south aligned.
- Module placement done to accommodate more modules in available space and shapes, results in sub-optimal generation, reduced savings caused by mis-match losses.
- Optimizers are essential to deal with mis-match losses.

7

Urban buildings need a managed service

Affairs of Urban Buildings are run by managing committees, elected by residents. They don't have time, resources, tools or knowledge to plan and manage solar infra. Suppliers provide only re-active support, which too is not up to the mark. Comprehensive maintenance is critical to ensure full system life, max energy generation, high uptime and for optimum savings.



Maintenance includes quite a few user level activities, which are not covered in a AMC such as:

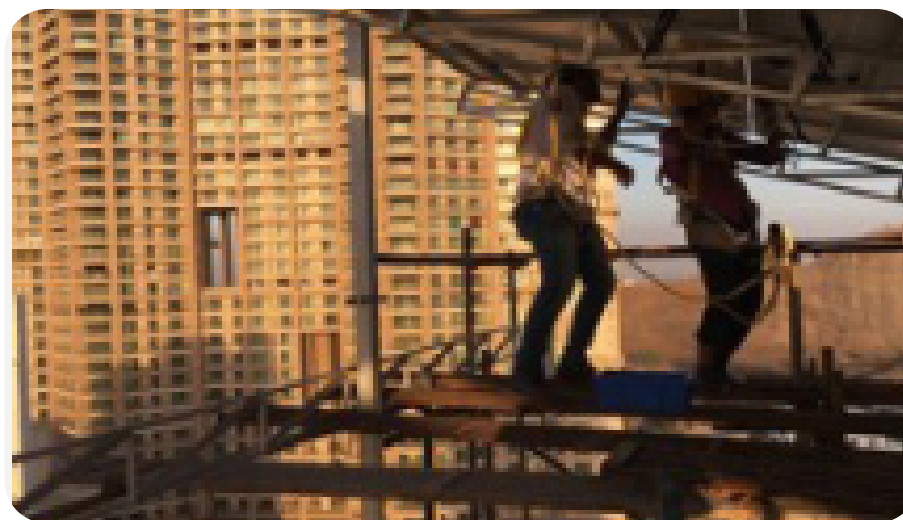
- Sending module cleaning alerts.
- Verifying whether cleaning is done & its quality.
- Daily monitoring.
- Measuring daily and monthly generation and reconciling it with electricity bills.
- Publishing monthly and annual report on gross and net savings.

Structures

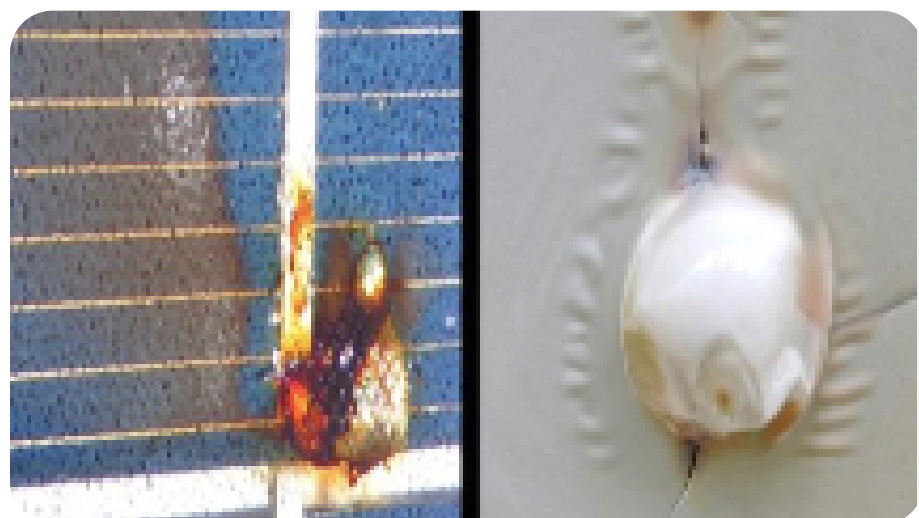
What to avoid?



Shading, airflow blocked



No access for cleaning and risky installation.



Module damaged due to hotspots caused by shading/ poor cleaning



Inter-row shading (likely in evening / morning)

Structure Design Checklist

- Handle peak wind loads prescribed for the zone.
- Built to last for 20 yrs or more.
- Compliant to municipal building laws (DCPR).
- Modules should be accessible for cleaning.
- No safety hazards for maintenance staff.
- Non-penetrating foundations on terrace floors to avoid risk of leakages.

Housing Societies- Sample Reference Projects in Mumbai

Won MH
state Energy
Conservation
Award

Apr 2018



40 kW Symphony CHS, Chandivali

Oct 2019



85 kW Green Ridge CHS, Borivali

Oct 2019



20 kW Sumit Pramukh, Malad

Dec 2020



18 kW Shiv Shakti CHS, Malad

Jan 2021



97 kW PantNagar CHS, Ghatkopar

We provide a fully managed
service at all of these projects.
Managed services are
comprehensive AMC + all user
level maintenance activities.

Skybless Value Summary



**Designed
with proven
tools &
software**

**Not with Thumb
Rules**



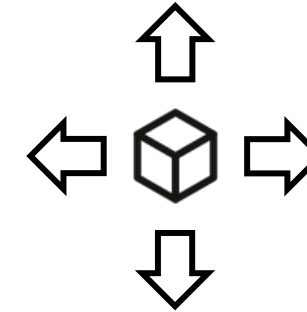
**Rooftop
focused**

**Optimizers,
Special modules
for max
generation**



**Zero Efforts
for mgmt.
committee**

**Standard AMC +
comprehensive
user level
maintenance
i.e a fully managed
service**



**Options
suitable
for your
project**

**We are not a
dealer of any mfr,
no compulsion to
use a particular
make**



**Generation
guarantee**

**We commit to
target energy
generation and
offer a financial
rebate for non-
achievement**



SkyBless

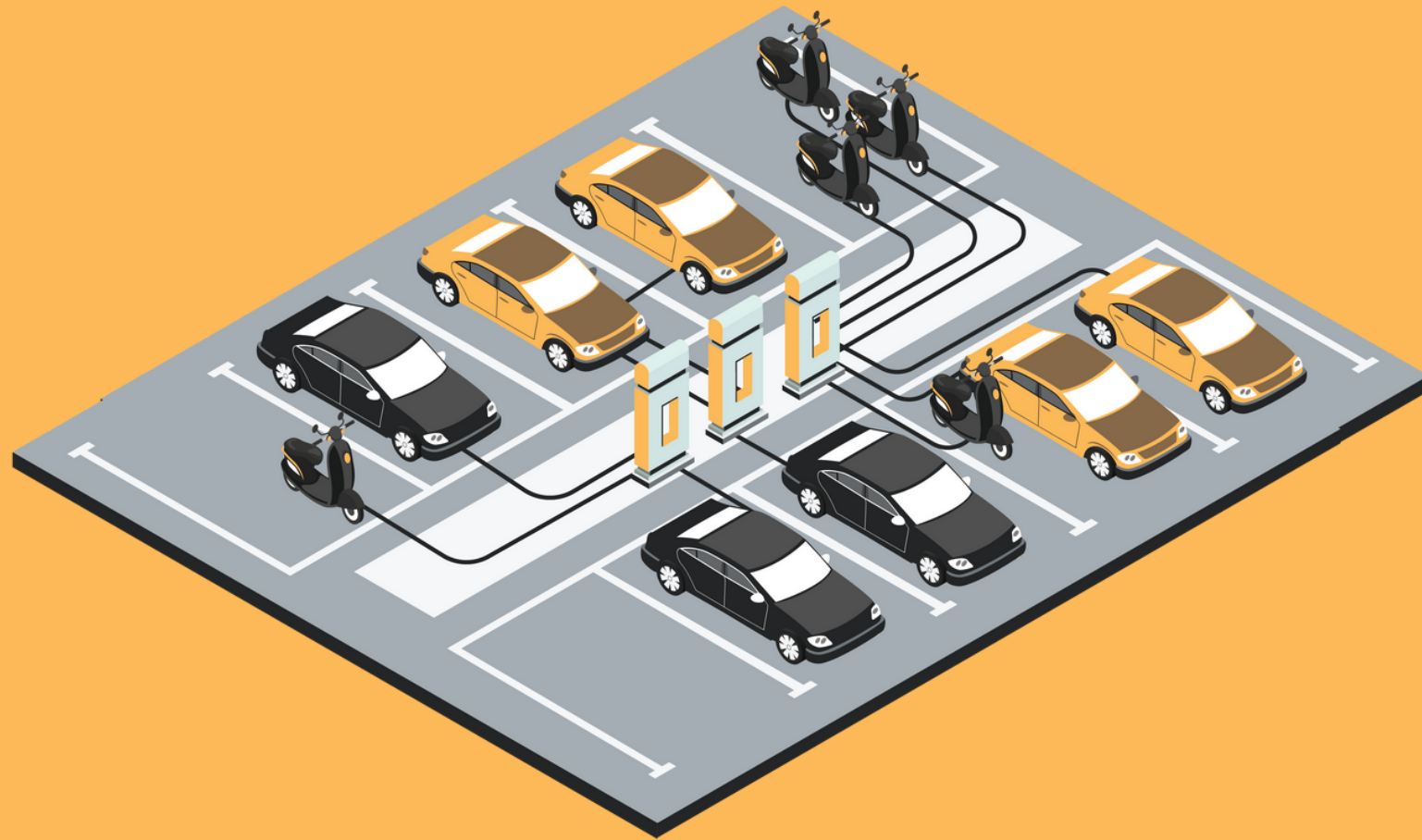
EV Charging solutions for
Urban Buildings



How do EV's get charged today?

- Slow charging from home electricity meter
- Neither scalable nor safe in Apartment Buildings
- New upcoming e-cars need 5X power than home meter can support
- Charged with grid power – akin to burning coal instead of petrol and defeats the very purpose of EVs

Skybless's EV charging solutions *for apartment buildings*



- Small EVs to top end e-cars, all covered
- Organized high capacity power distribution
- Safe, scalable and no hassles for EV owner or bldg admin
- Clean energy powering option for EV charging, lifts, pumps

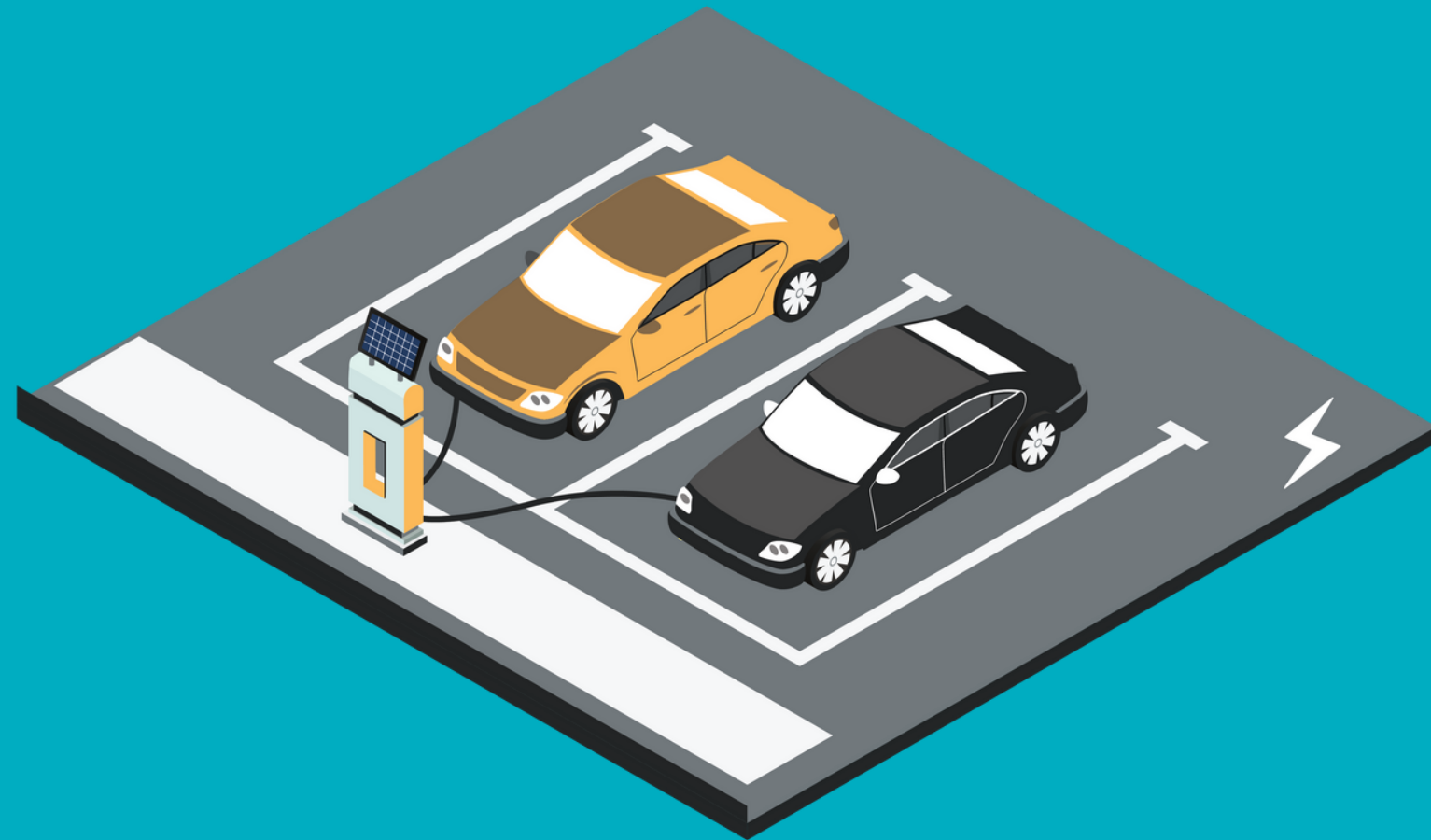
Skybless Dedicated Port Solution

*with Fast charging
for 4W EVs*



- No need to tap from home meter
- For both 2W and Cars
- 7/11/ 22 kW AC fast charging port for Cars,
- Pay through the mobile app
- Economical

Shared Charging for 4W EVs



- 20 kW to 50 kW
- Superfast DC charging 50 to 180 kW
- Supports both CHAdeMO and CCS Type2 standards
- Reserve, Start, Stop, Pay and receive alerts on mobile app
- CAPEX and Pay Per Use Models

Shared Charging for small EVs



- 3 kW AC charging for e2/3W
- Slow charging for small electric cars
- Reserve, Start, Stop, Pay and receive alerts on mobile app
- 3 ports per bay. 1 Bay good for upto 18 nos of electric 2/3 Ws. Add bays as EV count increases
- Pay per use – no CAPEX investment/obsolescence risk for the EV user



SkyBless

Unlocking clean energy value



<https://www.skybless.in>



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