

Building Feasibility into Platform

Ren Energy Design Team

Team	2	Problem	3	Storyboard	6
Iterations	8	Result	20	Insights	21



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Interaction Design

A feasibility factor is any external reason (lack of development, country laws, etc.) an energy procurement method may or may not be available.

E.g. In Vietnam, there is no precedent for offsite PPAs which would make an offsite project much less feasible there, while the US has access to many kinds of purchase agreements, giving it a higher feasibility probability.

The varying degrees of “development” in different countries results in certain technologies and methods of energy procurement being available in some but not others.

To quickly understand and take into account these differences while building energy portfolios for clients, the Ren platform needs to include a feature that allows users to see what is currently feasible, where that is, and what those feasibility factors will look like in the future.

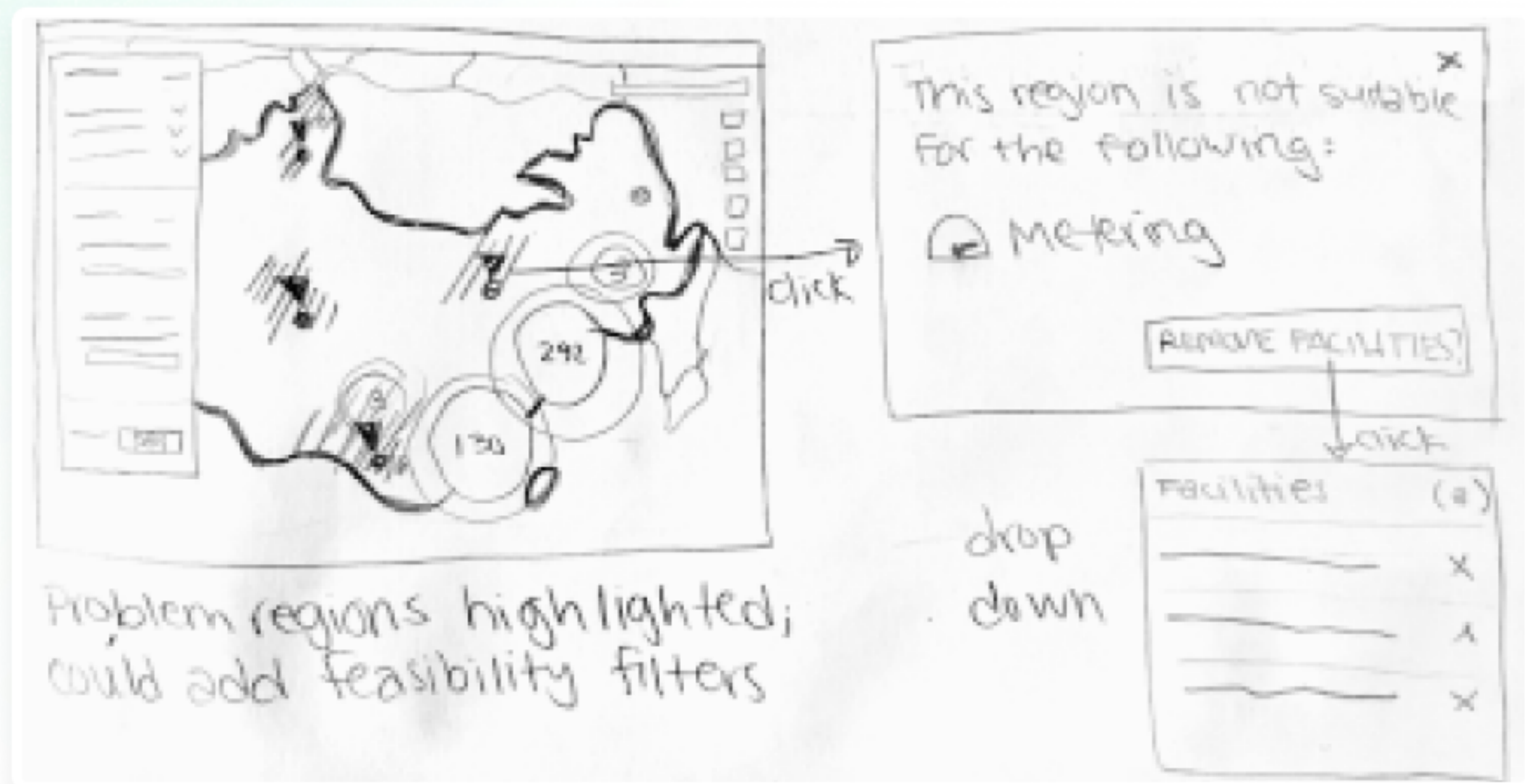
HOW MIGHT WE...

**design a simple way for users to view
feasibility information when building an
energy portfolio?**



Building Portfolio

- Need to sort by feasibility when building a portfolio
- Only facilities that meet the filter criteria show up on the map



Exploring Options

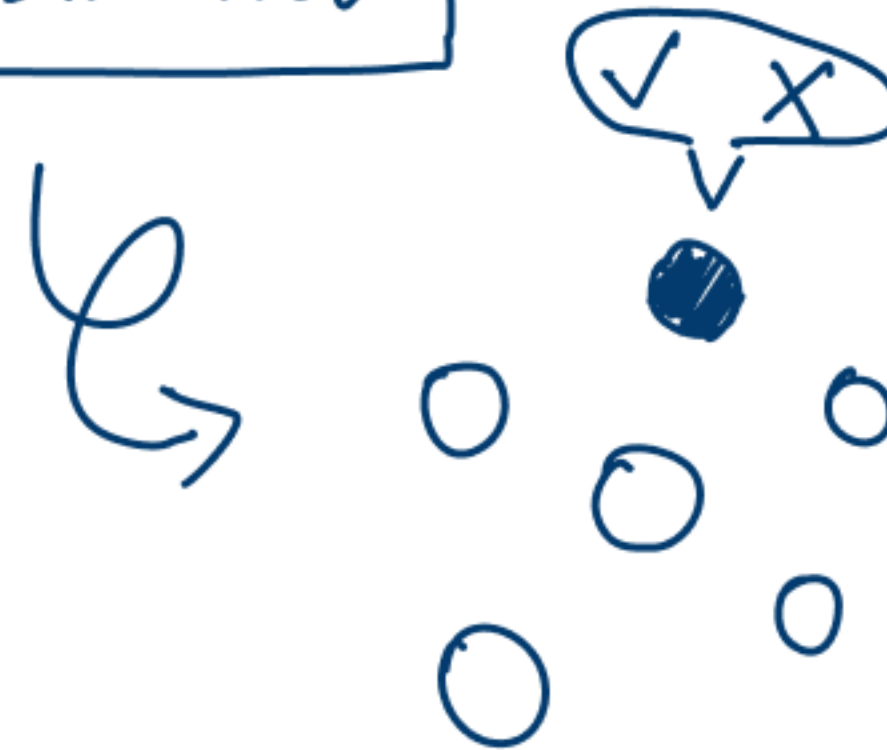
- Show clients what methods are available and where
- Understand the policies and reasoning why there might be a factor with a lower probability and success rate or why something is easier to get done

Filtering

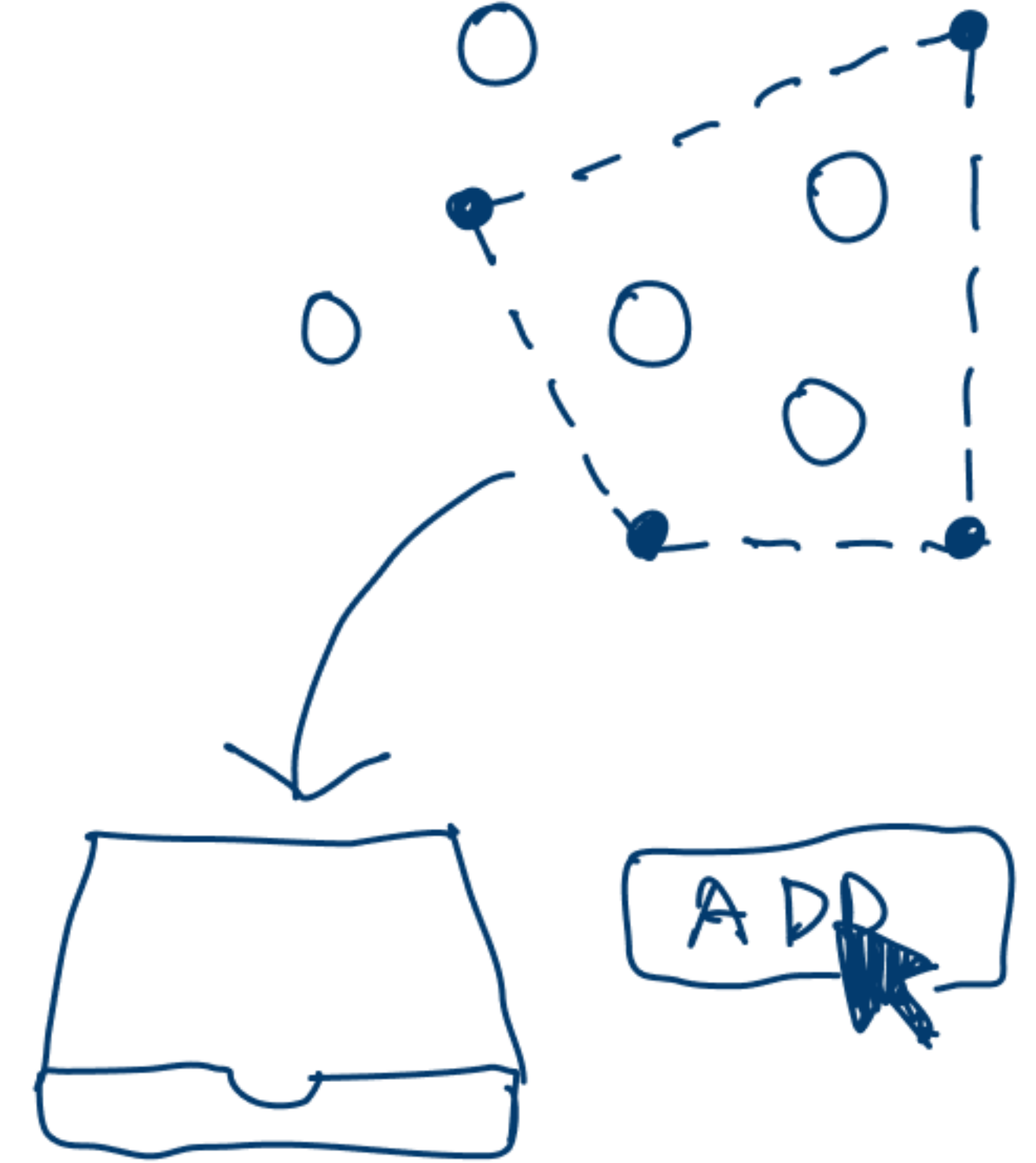


Logan is building an energy portfolio for a client. He needs to see which facilities support onsite solar and currently cross-references different spreadsheets to understand feasibility factors.

- Onsite PPA
- Solar Lease
- Purchase
- Net Metering
- EACs
- Carbon Market



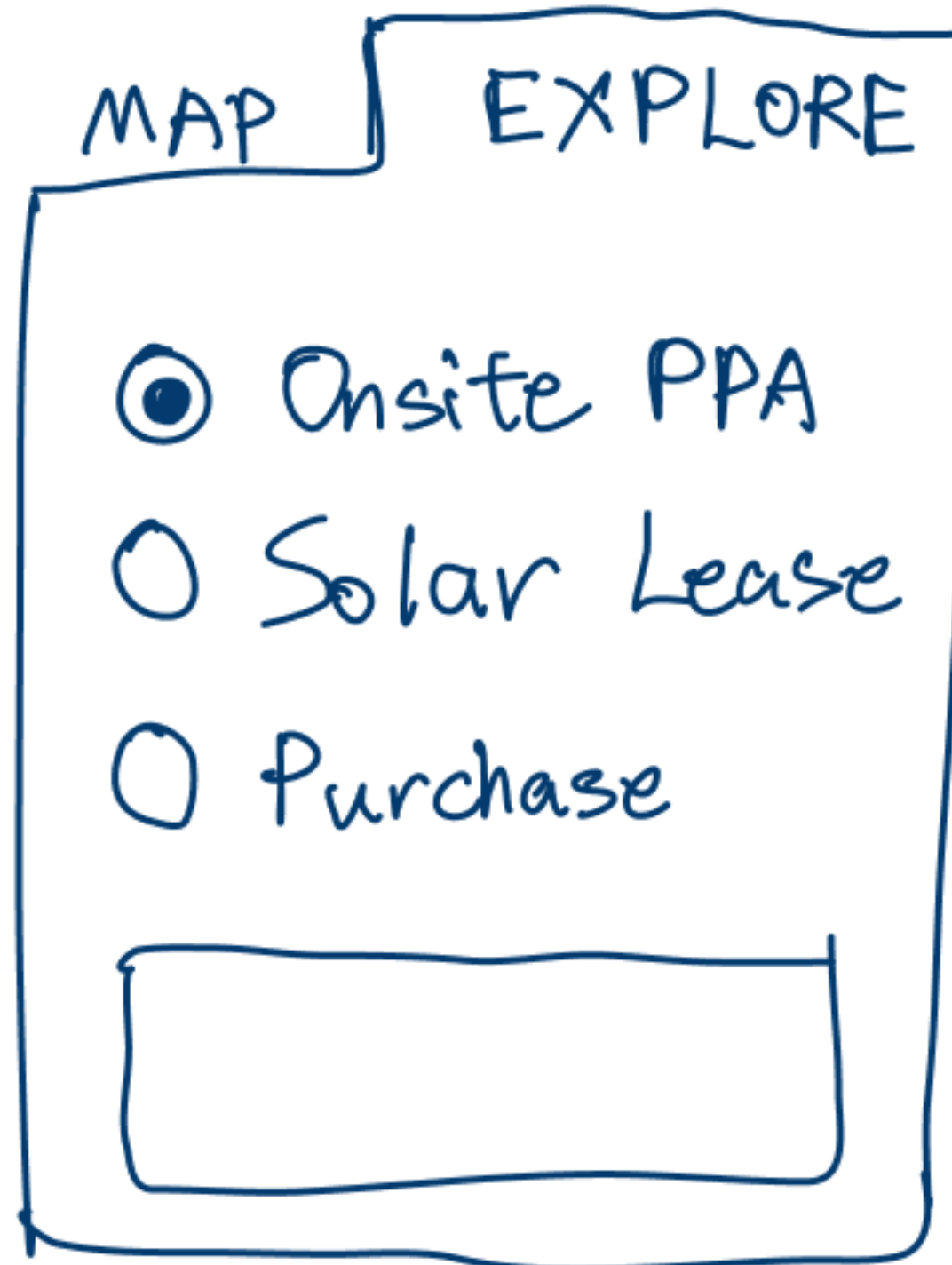
A filter that sorts facilities by feasibility factors is built into the platform and allows him to quickly create viable portfolios. He selects the onsite solar filter and any facilities that do not support it disappear from the map.



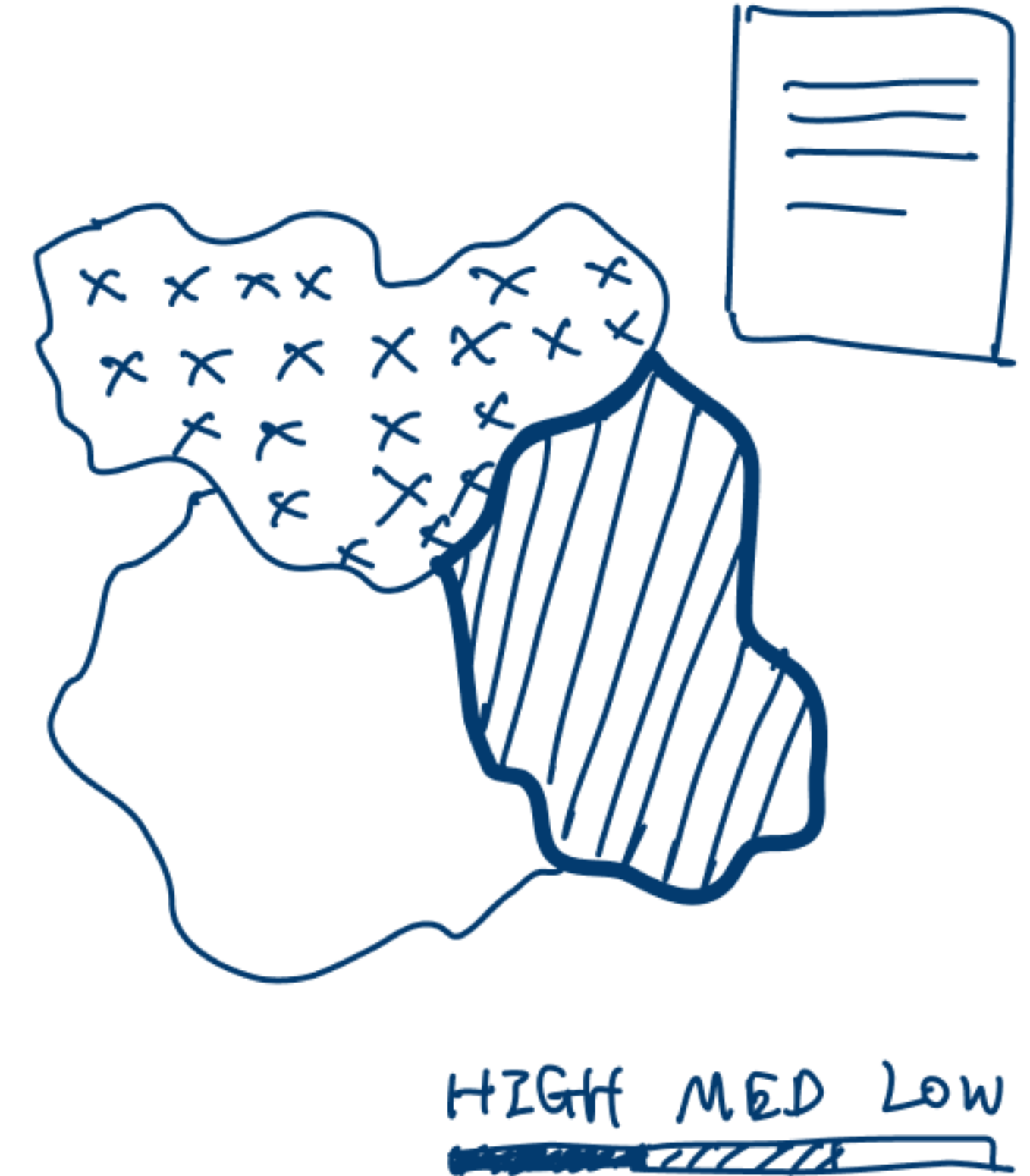
Thanks to this filter, only facilities that support onsite solar pop up on the map, making it incredibly simple for Logan to build an energy portfolio for his client.



Logan is looking to explore feasibility information at a country / province level.



The explore mode helps him understand the ways different country laws impact feasibility factors and their probabilities. He is also able to find facilities in different provinces and locate facilities for portfolio building.



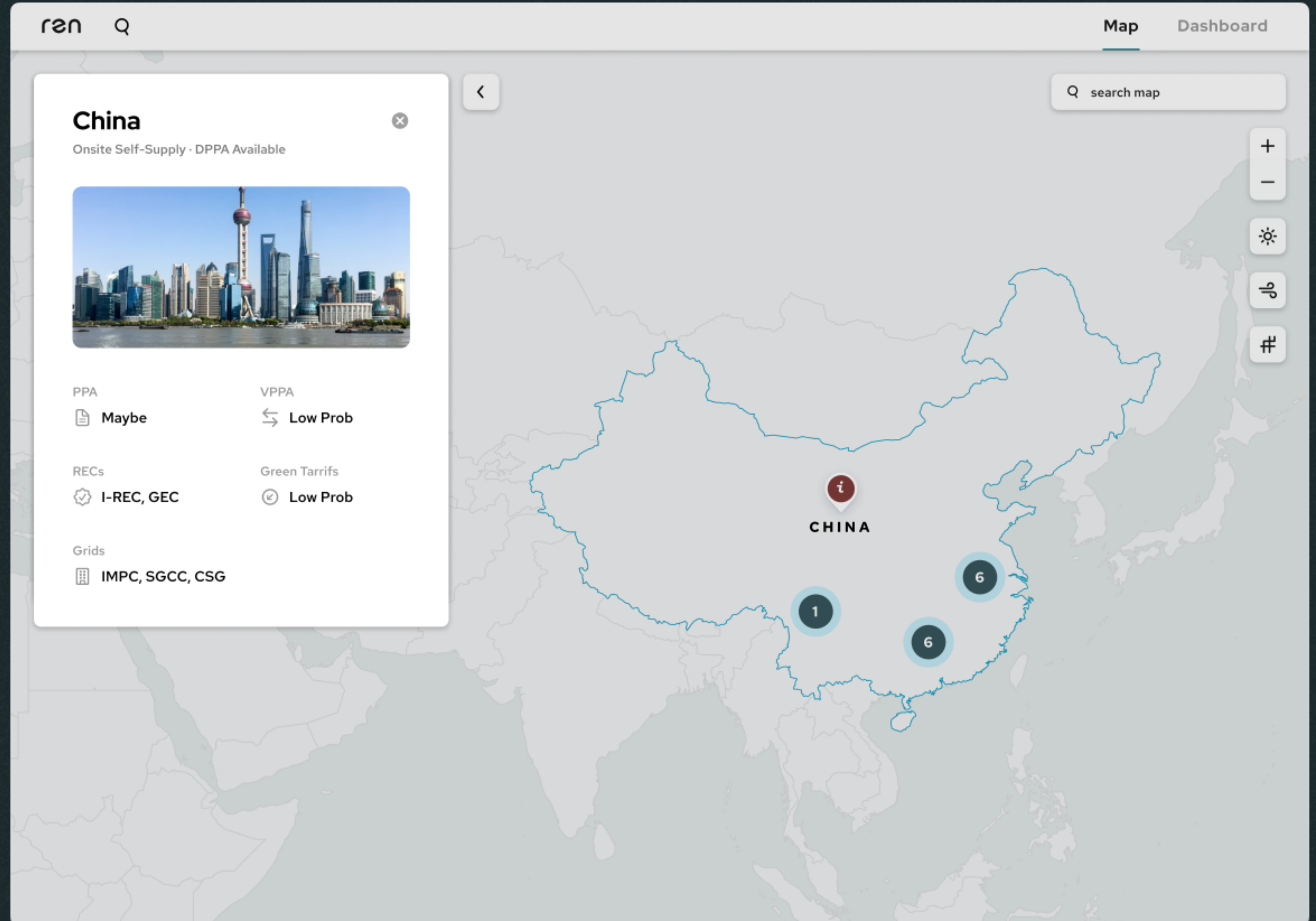
Finding facilities became much easier.

#1

ren

Filter

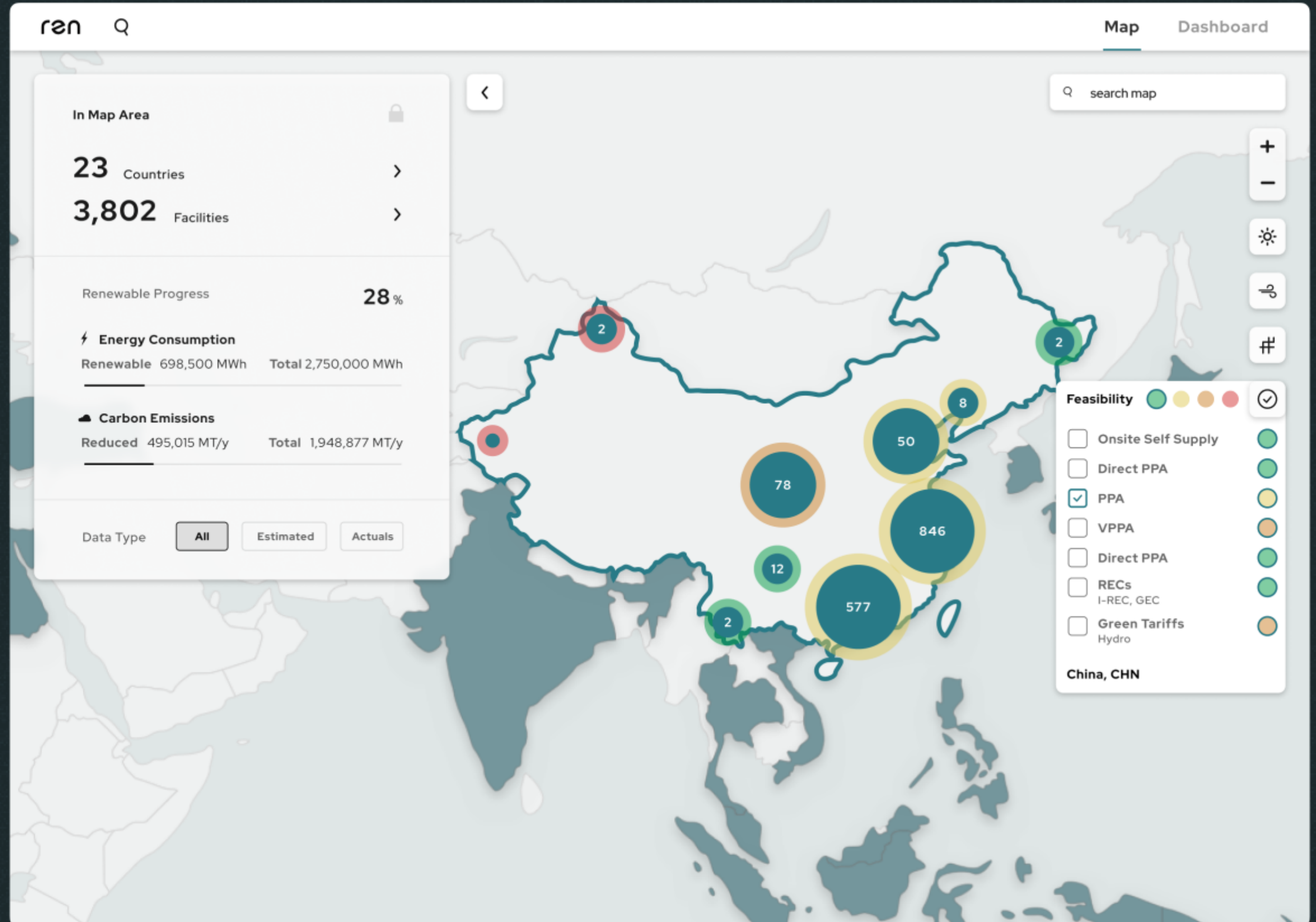
- Show feasibility info with modal box
- Using icon to represent different types

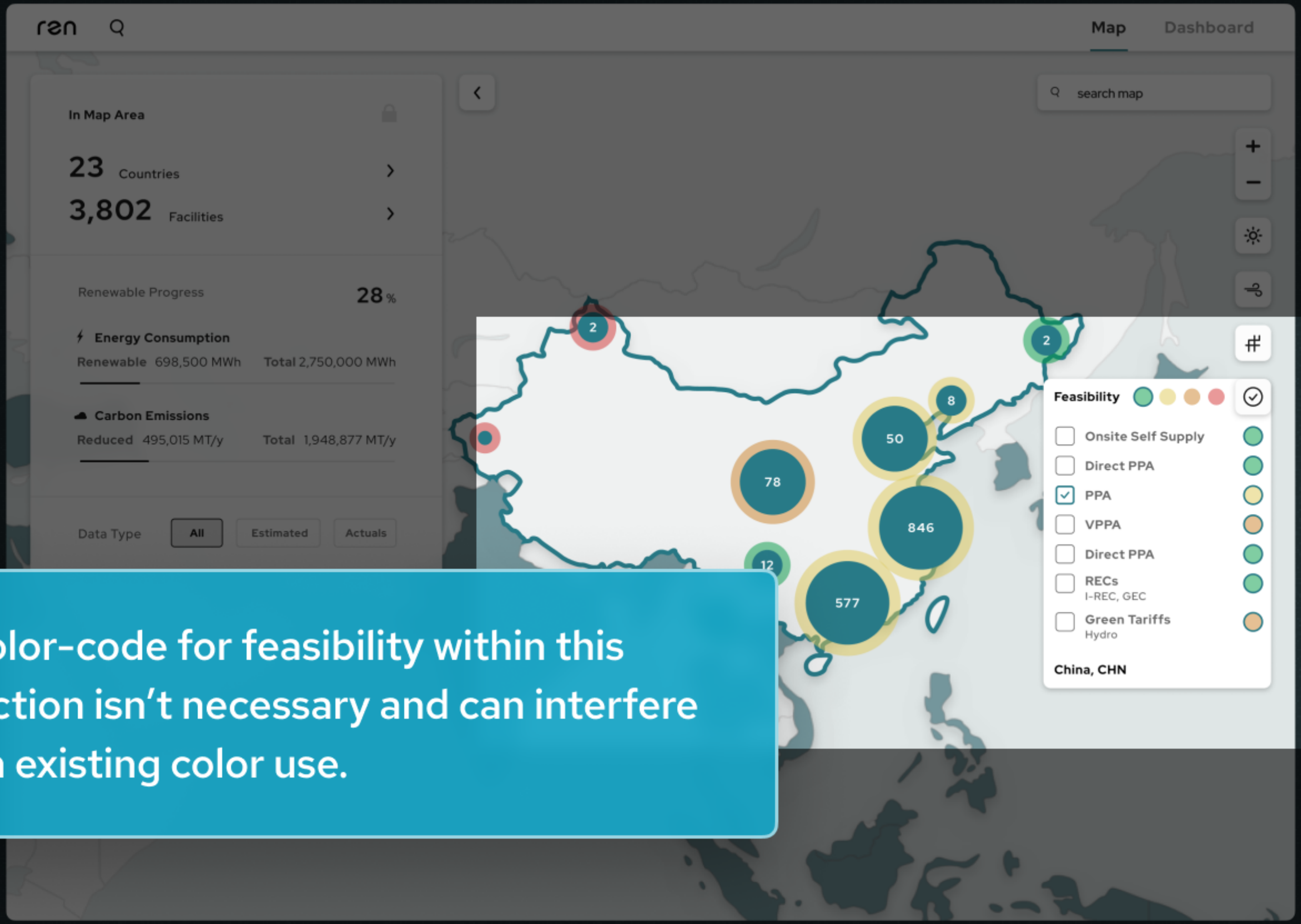


#1

Filter

- Add "feasibility tool" to the toolbar on the right
- Make use of filter to display probability of different facilities and overall clusters
- Color code ranging from red (not possible) to green (highly probable)



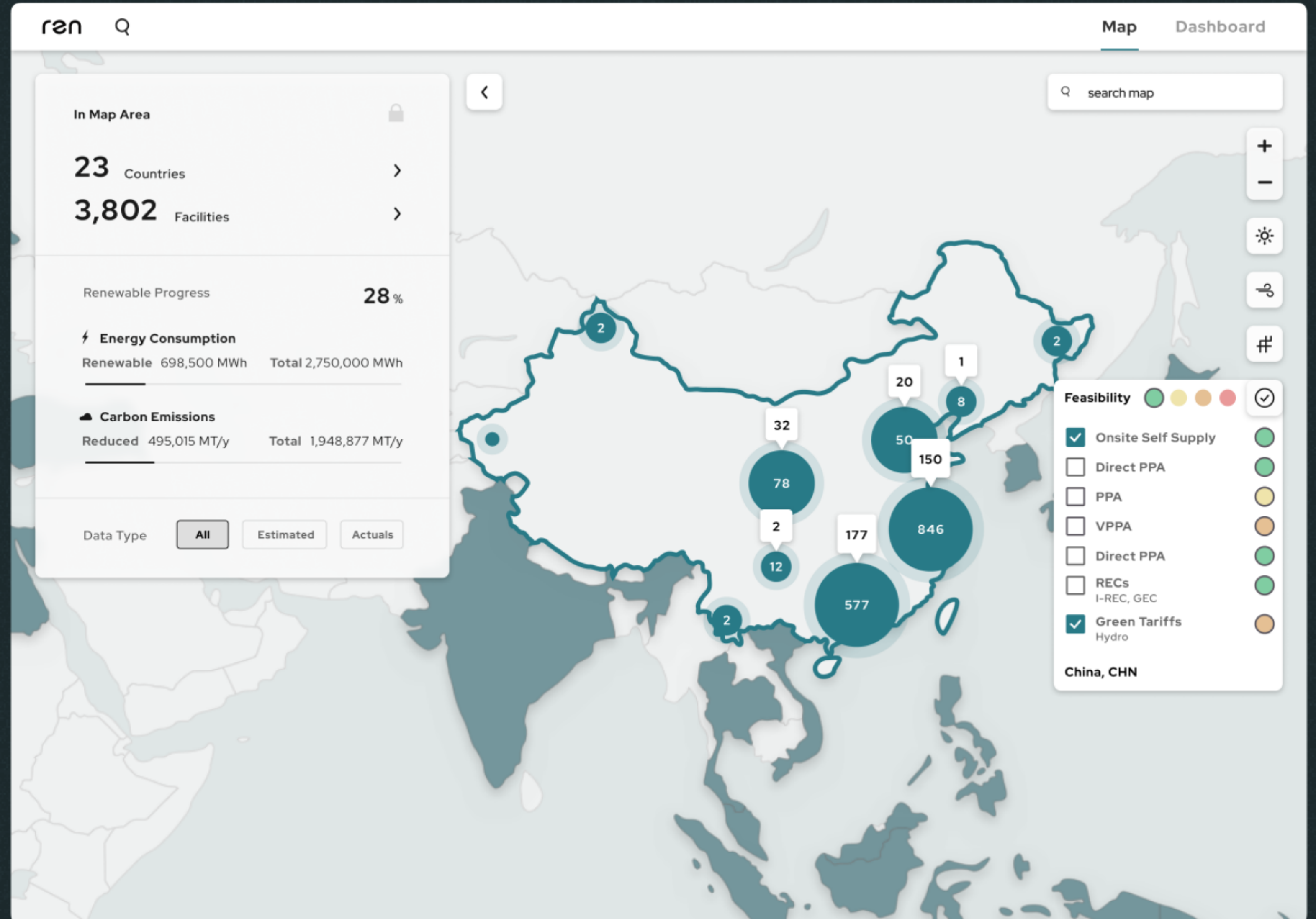


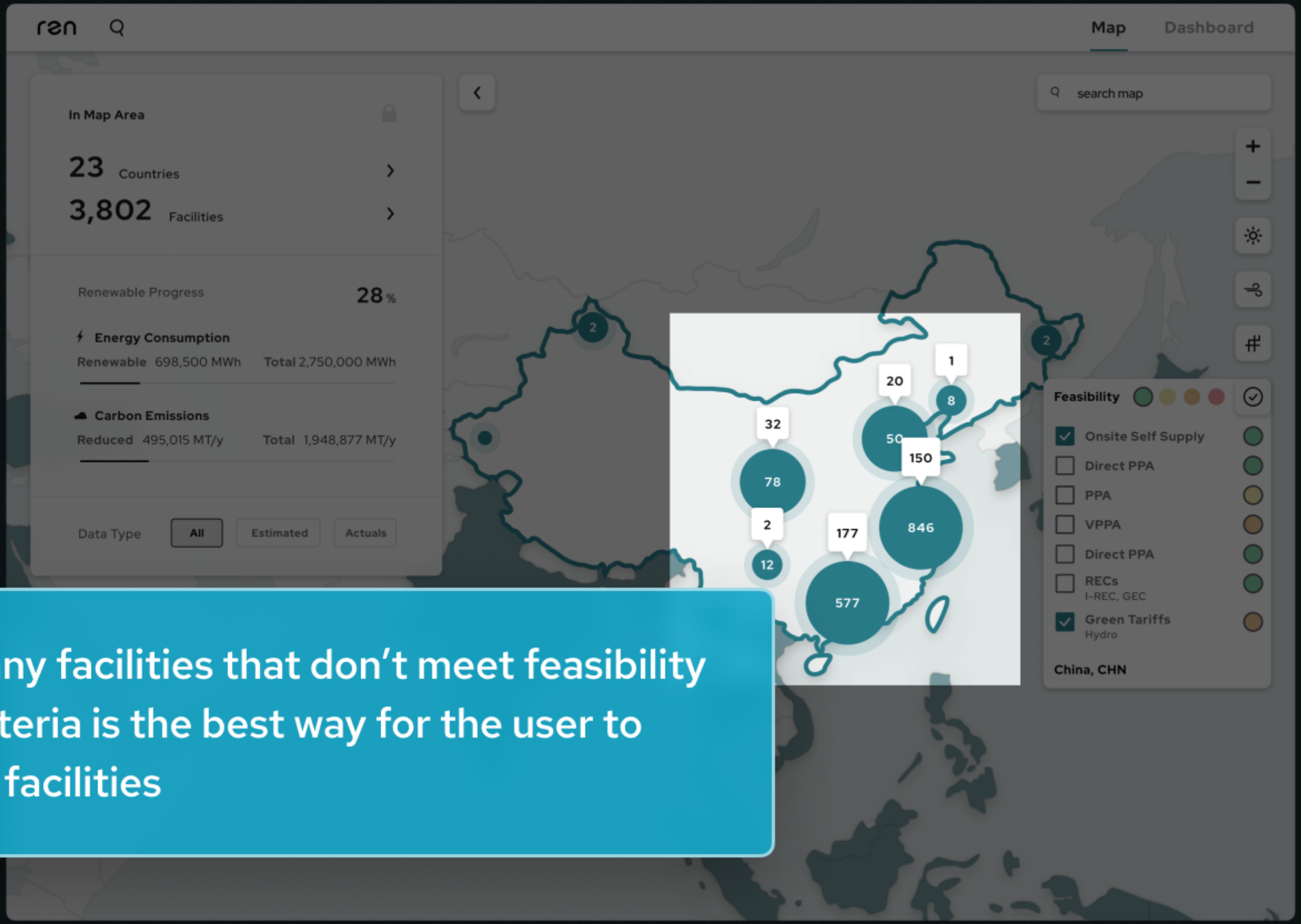
A color-code for feasibility within this function isn't necessary and can interfere with existing color use.

#1

Filter

- Include pop-ups with number of feasible facilities within clusters so the user can still view all facilities at once

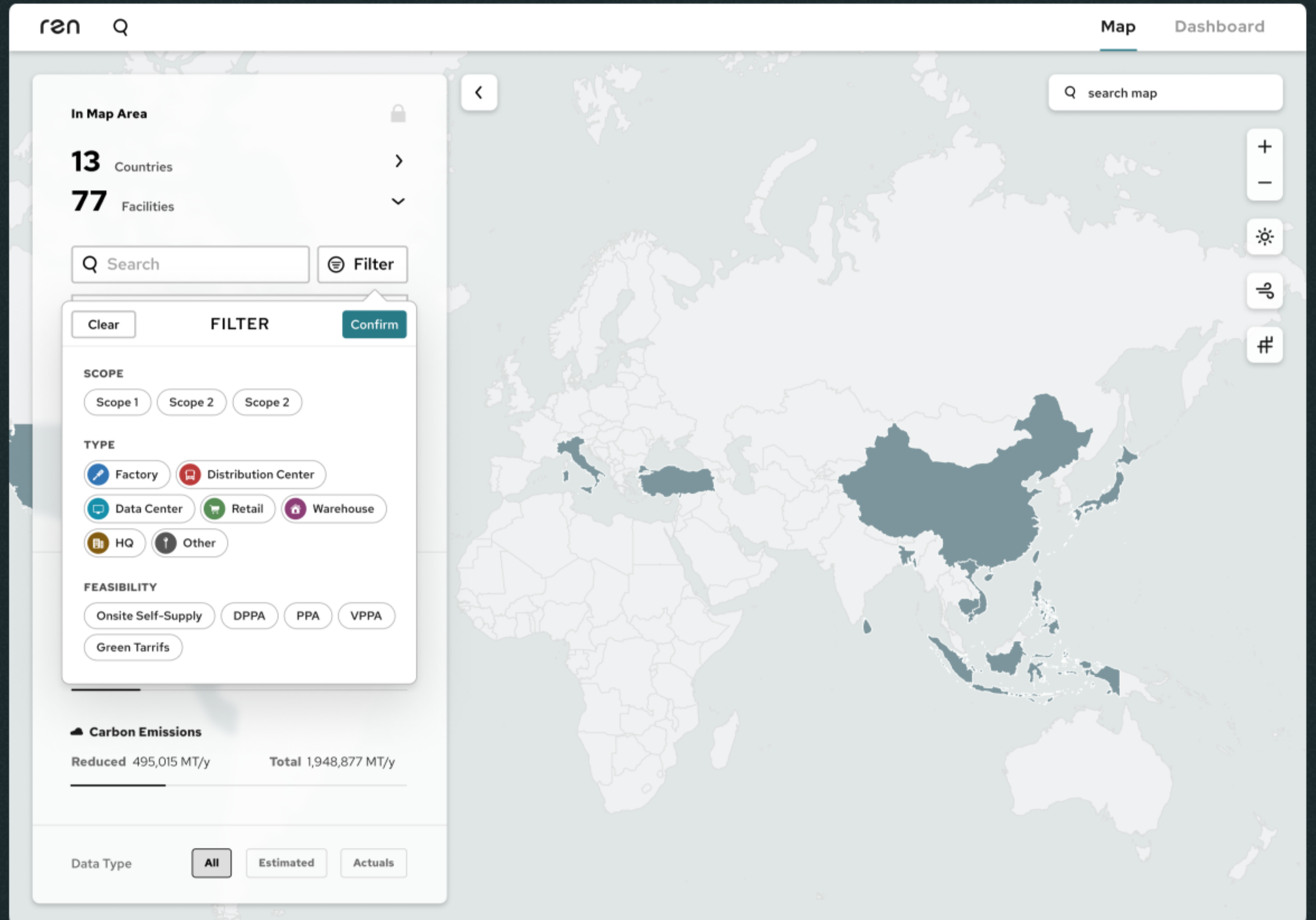


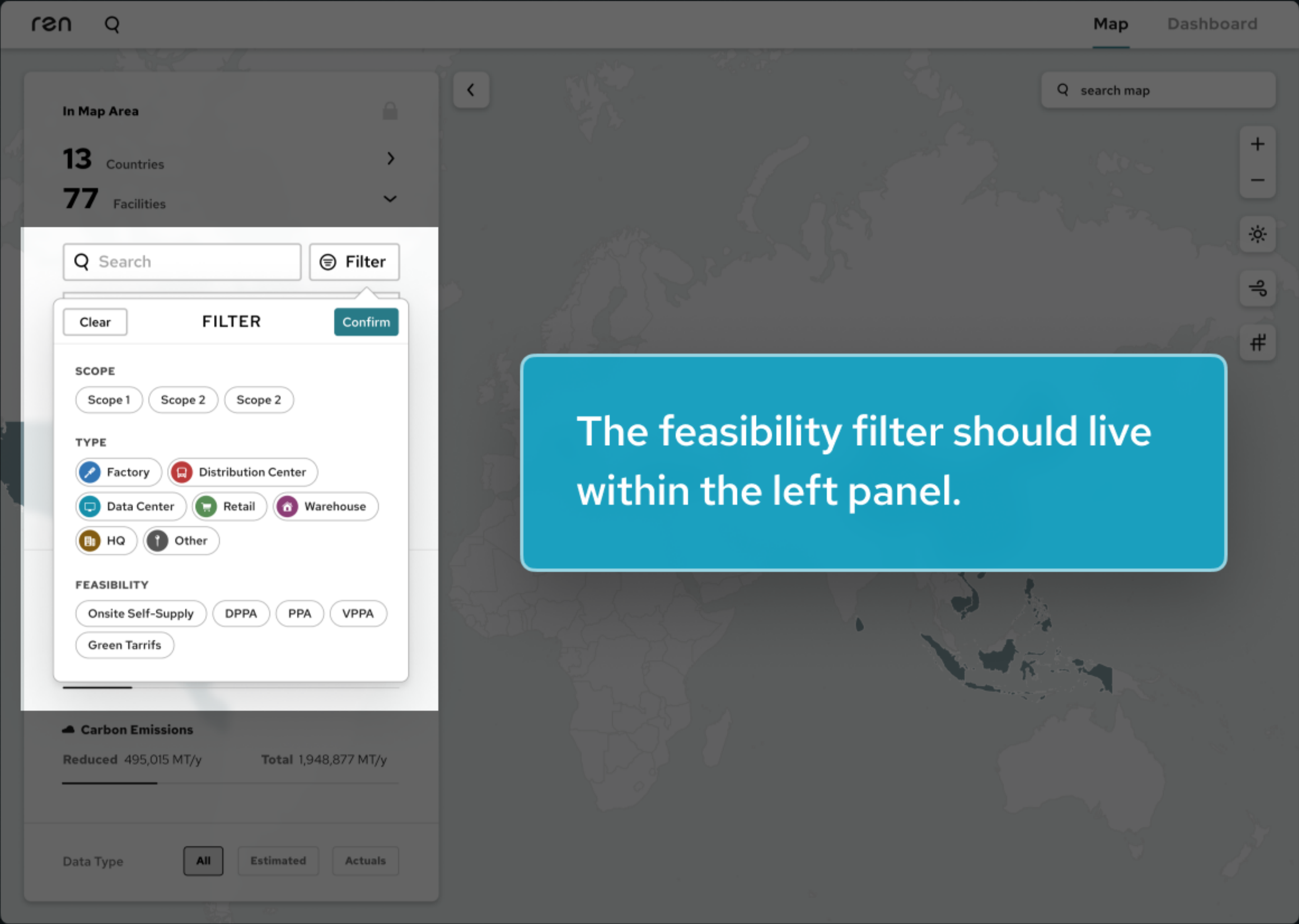


Hiding any facilities that don't meet feasibility filter criteria is the best way for the user to find the facilities

Filter

- Show facilities in list
- Add a new pop up filter to the list

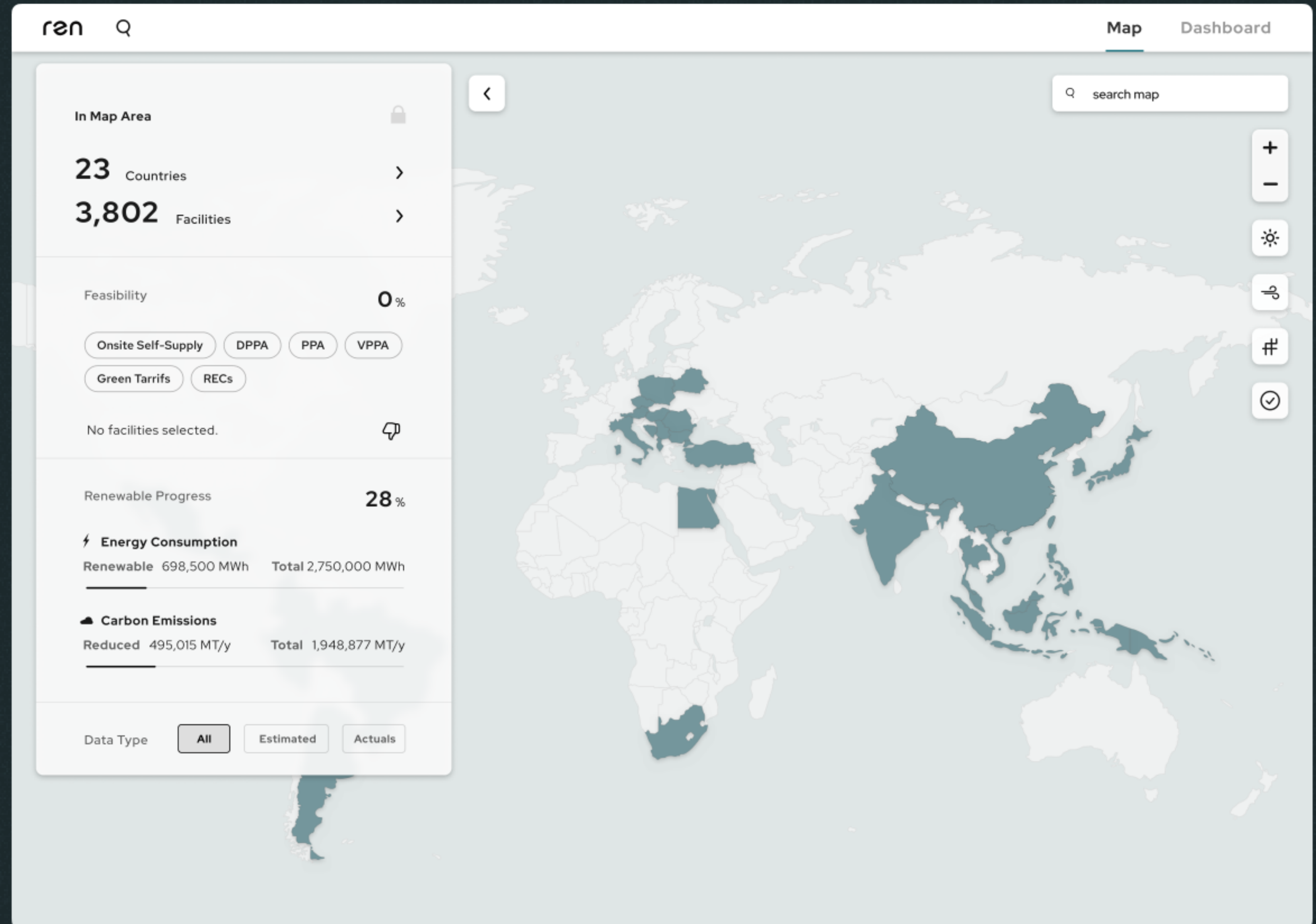




The feasibility filter should live within the left panel.

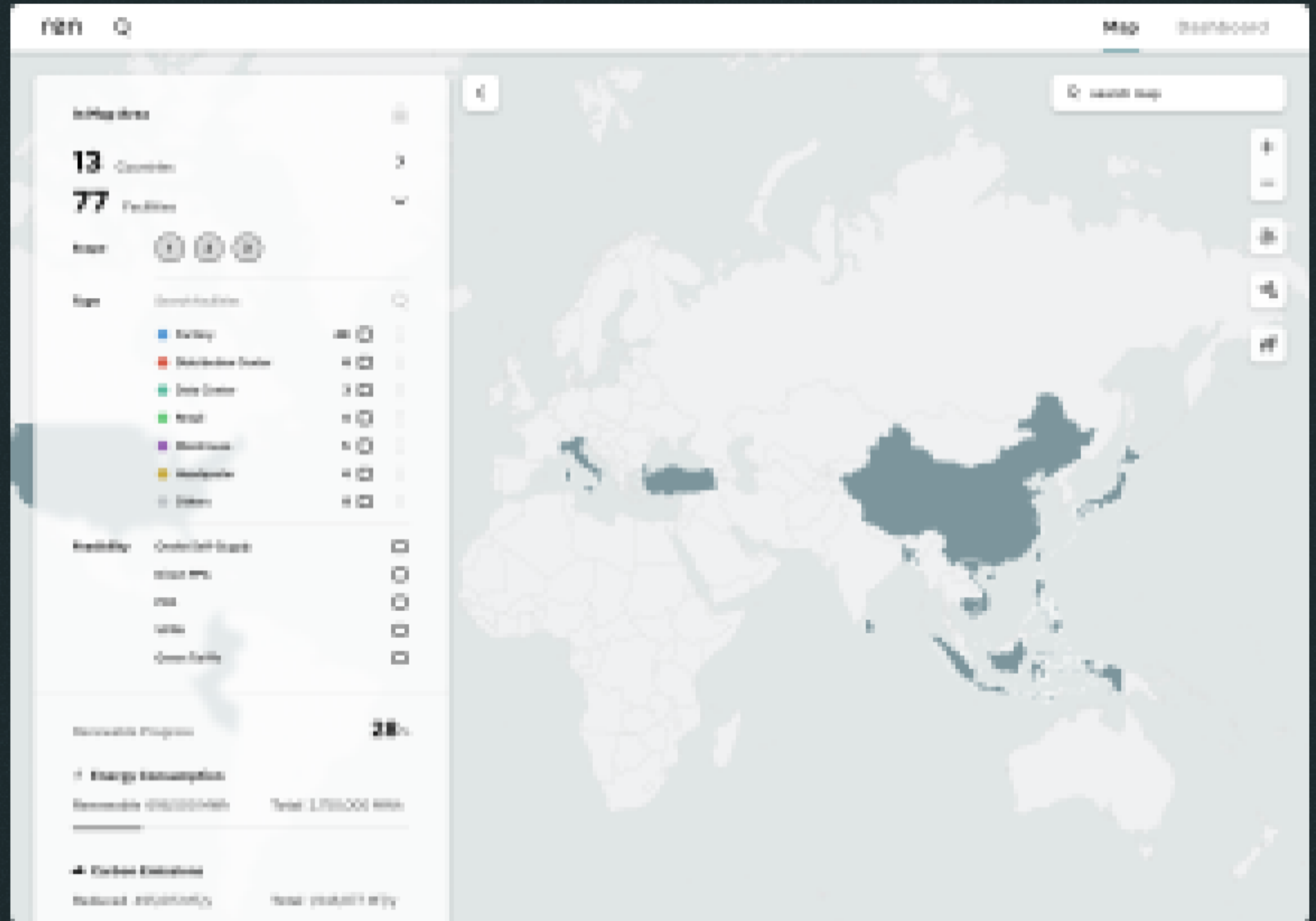
Filter

- Show feasibility options as a new section in the panel with chips
- Show the number of facilities that are selected and whether the overall probability is a "yes, maybe, no"



Filter

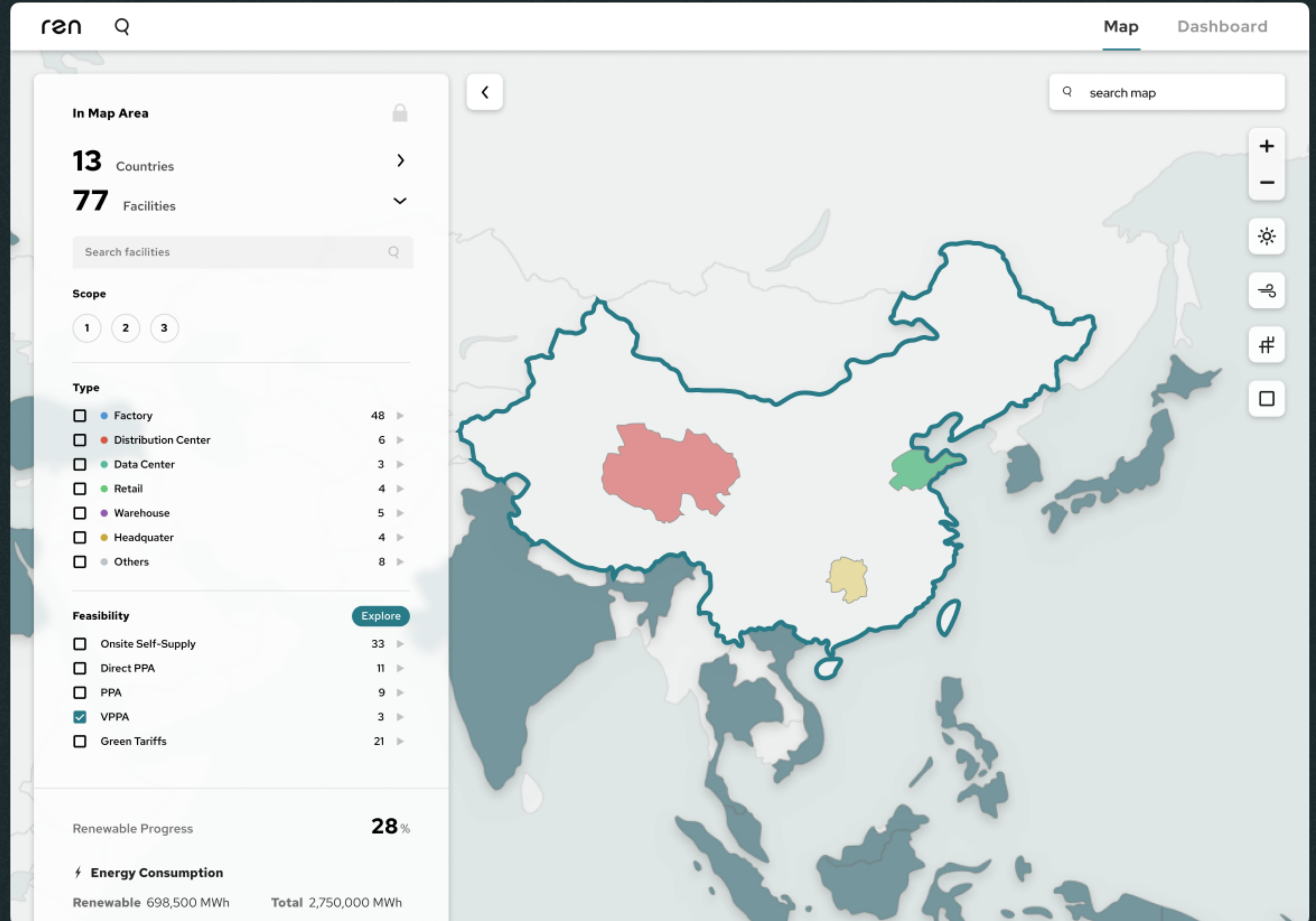
- Add feasibility section to filtering options of facilities



#4

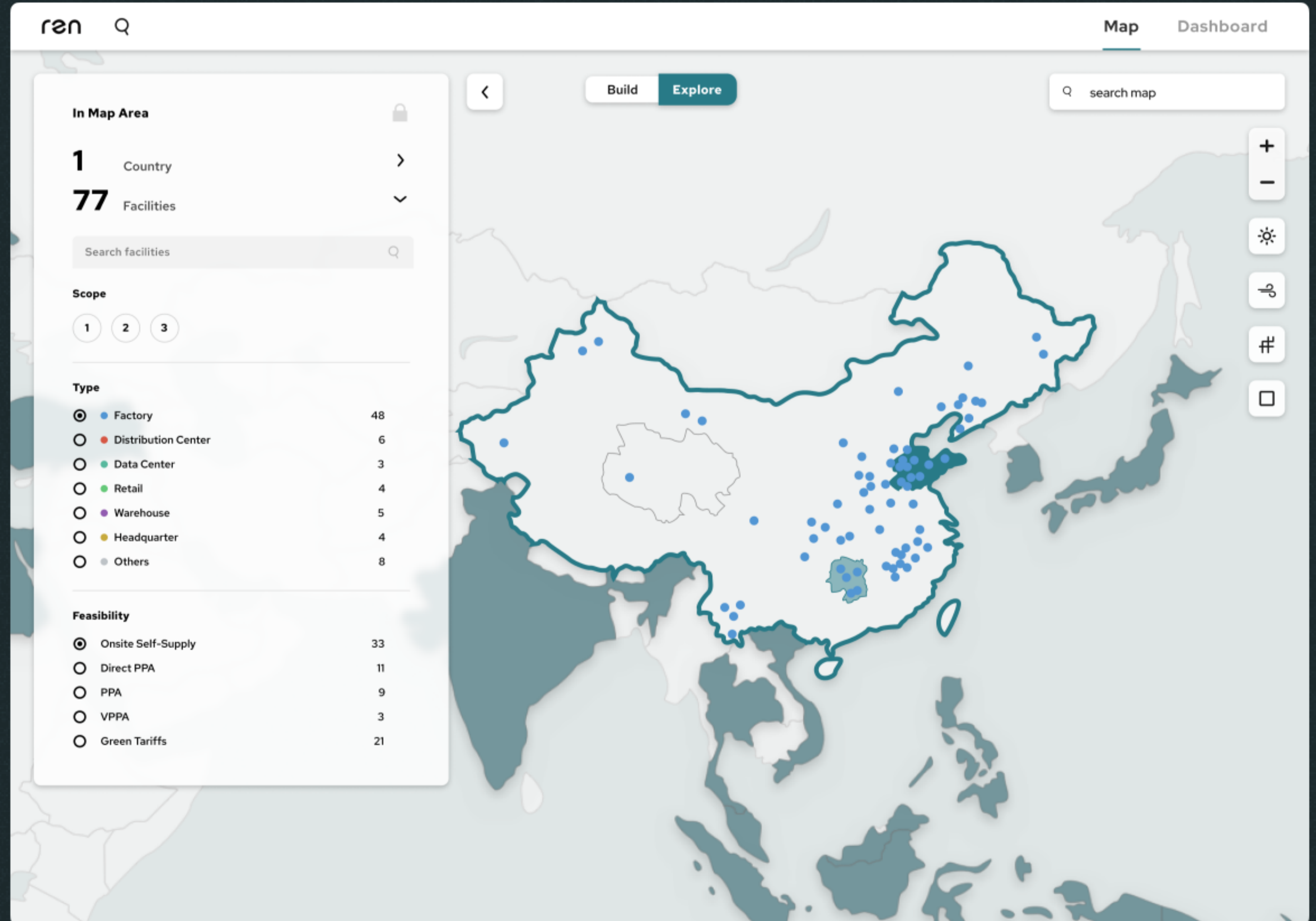
Explore

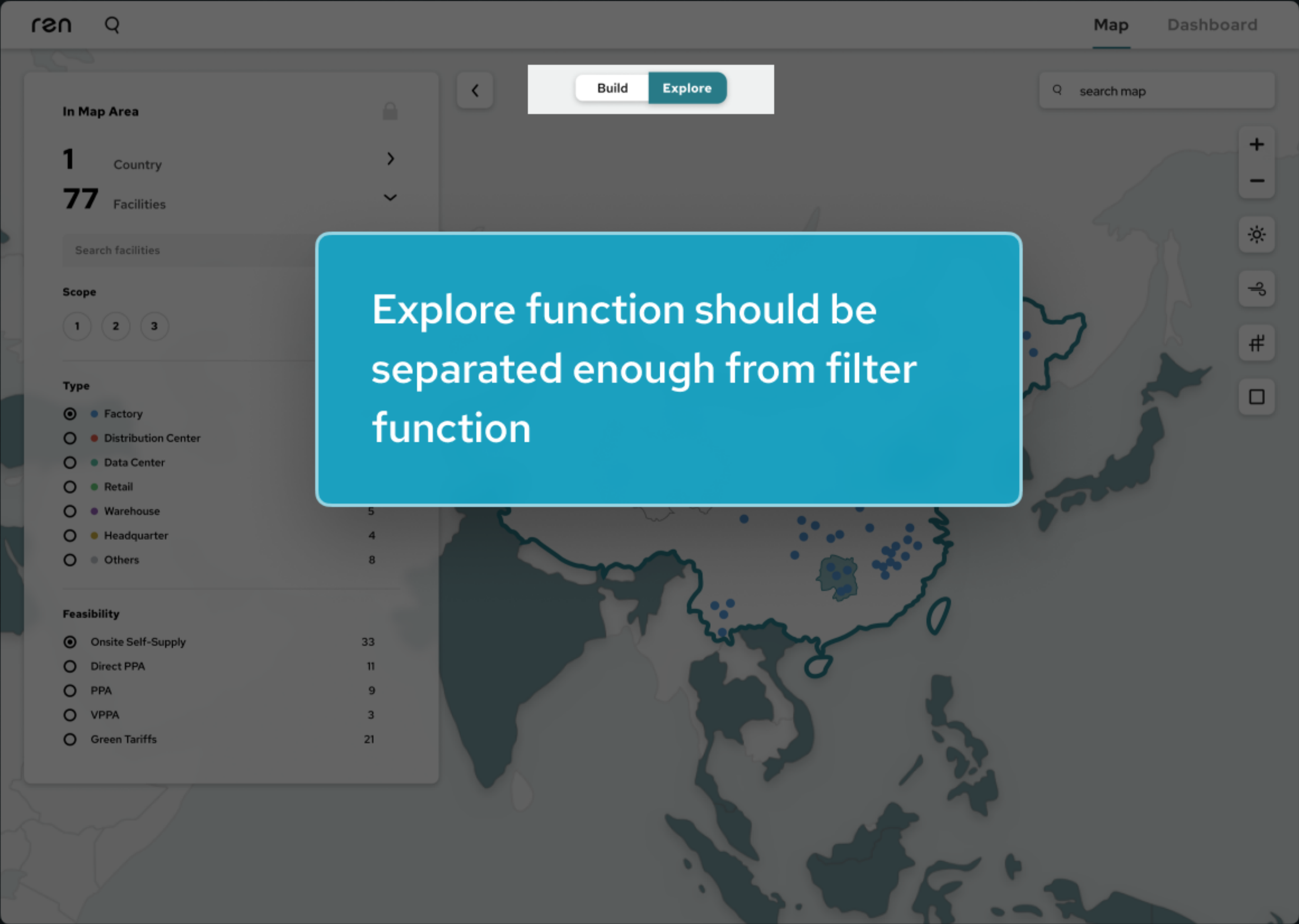
- Add explore button to toggle between facility view and explore view
- Filter to show feasibility status on the map



Explore

- Add a mode-toggle on the top to switch between build mode and explore mode
- Display facility status on the map while in the explore mode





Explore function should be separated enough from filter function