CAR PRE-HEATER (ELECTRICAL HEATER AND NOT THE AFTERMARKET ONE):

1.      Connected to power output provided in cars.

2.      Mechanical switches not electrical as u are not there to physically turn them on.

3.      We could have gone for a remote start but it's installed aftermarket and also not an option for many also it costs a lot of fuel while the engine is running and we know that fuel is expensive these days. It may also be responsible for unwanted pollution.

4.      We can also preheat the car seats. But that tech is already in the foreign market.

5.      We can go with 2 things:

·        It is observed that car engines are turned on to reduce the load on the car heater. What if we made something which might take a bit longer to heat the inside of the car but we can do that without turning on the ignition hence saving fuel and maintaining a constant elec. supply from the car battery to the car heater. That’s where this kind of device comes in.

Working: Coolant absorbs the AC heat from the surrounding environment and car radiator coolant passed through neutral air and finally exits through vents.

·        We separately get an electric heater and use our device to sense temp and adjust the intensity of heating accordingly and if it reaches a certain temp threshold defined by the user, we can also implement the idea of turning it off completely and cutting off the power supply. Therefore, we can save both battery power and fuel.

AIR CONDITIONERS (CENTRALIZED ACs AND CAR ACS):

1.      At a place that can maintain a constant temperature that does not require cooling or heating. In that case, first, ac fans start and as the user demands, we can further control fan speed and cooling mode and heating mode respectively.

2.      For places with higher temperatures, we can get user input for the temp he wants prior to him entering the environment. As this goes along, instead of the fans turning on in the above case we can implement to directly increase the fan speed and set the mode to cool the room before the subject arrives in the environment.

3.      For places with lower temperatures, we can alter the temperature as per user needs. Here, we can combine both the above cases as first we can bring up the fan which helps us in establishing an ideal room temperature at first like from 10 degrees or lower room temperature to at least 25–27-degree room temperature. Then, if the user permits us to further increase the temperature through confirmation, we can aim to further increase the temperature by>35 degrees or >40 degrees.

4.      This was all discussed keeping a view of a household environment. We can always take this a step further by implementing the same tech in places with centralized ACs like offices, banquet halls, etc., and most importantly in cars, as we all at some point in our lives have experienced a time when we wish that someone could just go and turn ON the AC in the car because we might have to leave in few minutes and has been in SUN on that really hot day and we know that you don’t want to put your hands on that hot steering wheel or yourself on that really hot seat. Lucky for you, we might have a solution.

5.      For example, we suppose your car is really hot and you put the AC at full fan speed and reduce the temp to 16 degrees. At some point we might feel like shivering and if u r the one who is driving it might be tough to make your way to the instrument cluster with your hands and manually adjust the temperature. Some might think what’s a problem in that but a second away from the road can lead to a minor or a major accident. We also know what consumers with voice control have to say about this, okay guys we get it your car has voice control but what if there is loud music or you face a situation where your voice isn’t recognized by the assistant. In that case, we might need an alternative which can be more reliable despite having your attention on the road.

HEATERS (WATER HEATERS AND SNOW MELTERS):

We would like to address this scale-up idea with the help of 2 real-life situations.

1.      You are asleep and remember that you are late for your office and might not be there in time. It’s an amazing day and you don’t want to go unbathed. So, u step into your bathroom and turn on your geyser and now u have to wait what r the chances that when you step into the shower the water might be of adequate temperature (like not too hot or not too cold). That’s where we come in, select a favorable temperature and this tech will keep the water in the heater ready at that particular temperature when you require it the most so that you can easily hop in and out real smooth. Maintaining a constant temp and reducing supply to the coil and therefore increasing the lifeline of the coil.

2.      We get it when you are on a hill station with snow everywhere and we can’t deny the fact that everyone admires it. But what if we said that there is an efficient way to utilize the excess snow and put it to some good use and it also helps in harvesting water to a certain extent. We do admire the view but to keep it that way we have to put excess snow to good use and technology already has us covered, here is where snow melters come in. If by chance you didn’t hear about it let me give you guys a brief idea, it is a self-explanatory term it melts the excess snow. Now it doesn’t know when there isn’t snow anymore in the container and goes on heating which uses resources or in most cases it goes on heating the water till it boils. We need to change that; we can set a stage where when the snow goes to water form the melters stop or when water reaches a certain user defined temperature the melter stops.