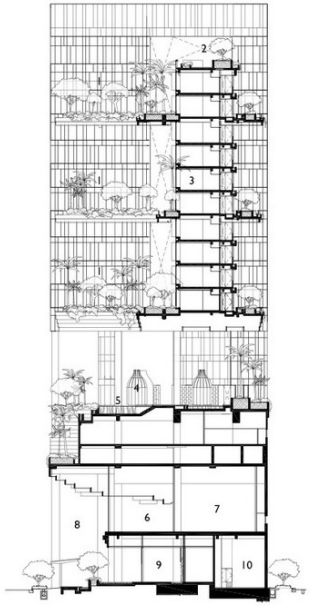
Park Royal Tower, WOHA, Singapore, 2013

1. Provide a brief overview of location and climate.

The location of Singapore is between Malaysia and Indonesia. The climate is formed by uniform temperature, pressure, high humidity and abundant rainfall. The average temperature is between 25 °C and 31 °C. The relative humidity is in the range of 70% - 80%. Thunderstorm and rain occur 40% of all days. The warmest month is April and the coolest month is January. Moreover, the wetteset month is November.

2. Describe the design intent and building environmental design strategies/features in the building. Identify how each environmental design strategy affects the heat flow equation in the building.

+ Solar: Solar panels
+ Ventilation: landsacpe designed as conceals opening (while cooling and naturally ventilating)



Park Royal Tower is overwhelemed by greenery and glass reclaimed by the tropical landscape. It is known as one of the great greenbuildings in Singapore. It has skylights, solar panels, energy-saving elevators and escalators. It also has the highly effiecient air-conditioning units and software which controls the building's carbon dioxide emissions.

The structure underscores Singapore's commitment to greening through generous incentive schemes and a building rating tool that encourgages improvements of sun-shading exterirors, water-efficient fittings, computer modeling energy flows and carbon emissions. Greenery from the park is echoed in the building in the form of waterfalls. The landscape was designed as conceals openings to the aboveground carpark, while cooling and naturally ventilating the space.

3. Describe what would you have changed if you were in charge of the project.

This building designed for the energy saving. It brings vegetation directly to the roooms, provide sun-shaded and well-ventilated relief spaces. The trees protect from the weather and direct sun. The builidng allows nature to grow and automated the irrigation system to reduce day-to-day attendance. It seems like WOHA considered a lot of controliing Singapore's humadity weather. The building already have solar system and reducing carbon dioxide system which is very succesful. They even choose perfect plants which can grow up straight. Bringing the nature as the part of architecture design is very impressed, so it is hard to change any systems of this buliding if I am in charge of this project.