

# Smart House: Go Green

## Minimising Human Impact on the Environment

Automate an aspect of your home to make it easy to be environmentally friendly!

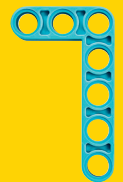


### Think like a scientist:

What are some ways that human homes impact the environment?

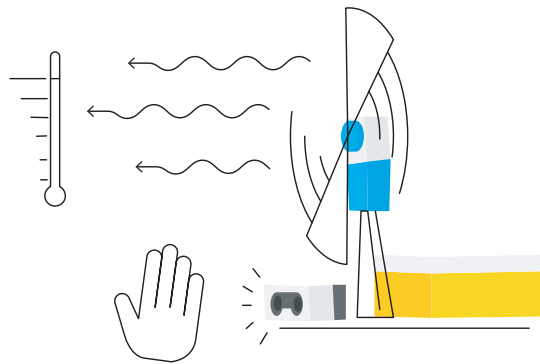
### Think like an engineer:

What process will you follow to optimise your design's performance?

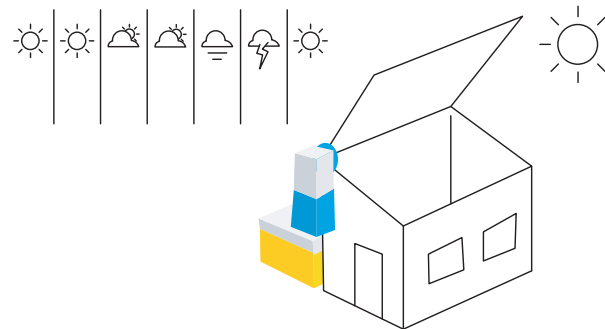


## Example Ideas

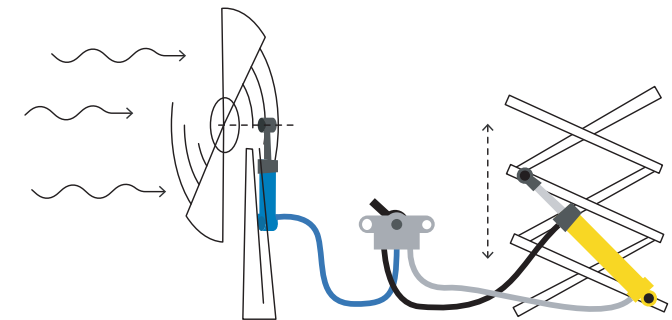
How will you use motors and sensors to automate an action?



Turn off the fan if you move away.



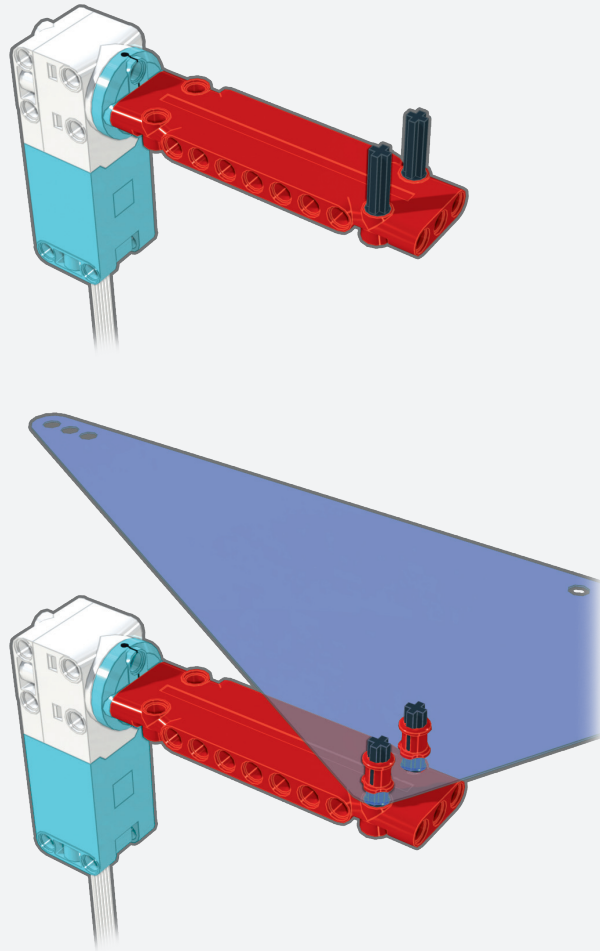
Open/close the window in particular weather conditions.



Convert and store enough wind energy to make something move.

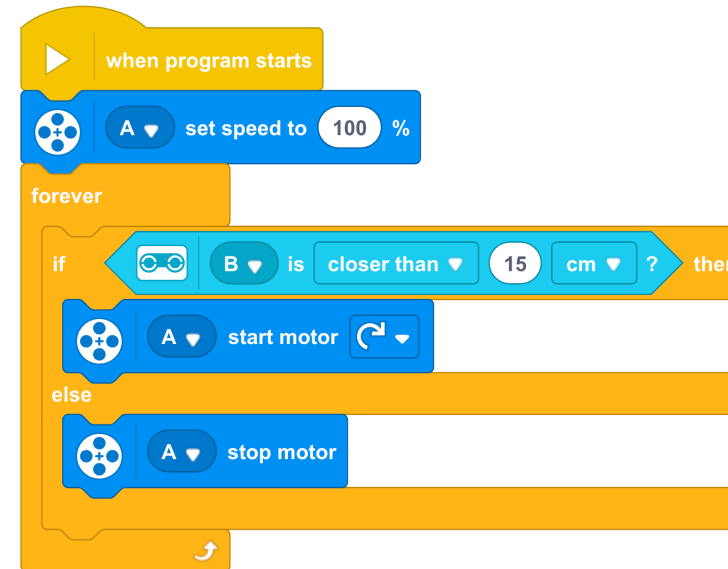
## Build it!

How will you attach the panels to your model?



## Code it!

Sample program for the distance-sensing fan:



### Describe it!

What input is being sensed?

What output should happen as a result?

### Modify it!

Can you add another condition for the fan to turn on or off (time, outside temperature,...)?

## Challenge yourself!

Create an advertisement to convince someone to install your invention in their home. Base your messaging on the invention's positive impact on their daily life and the environment.