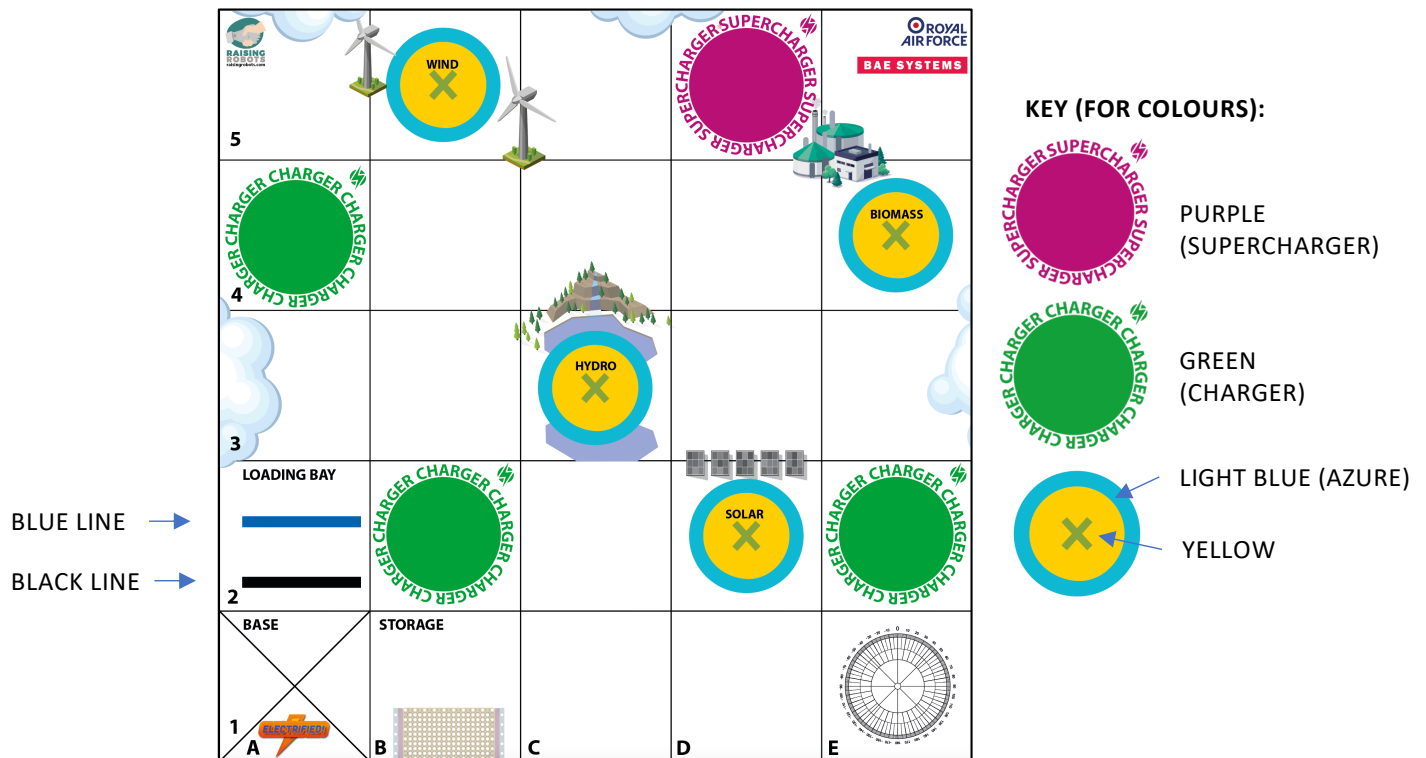


## MISSION 2: Going Green!

### Explore and Deliver

#### Outline of Mission 2:

It's time to start programming your Electric Vehicle (EV) and explore the Mission Mat. You will tackle some great challenges in this mission, so work hard on developing your coding skills! Once you feel confident moving your EV around, it's delivery time! There are solar panels that need to be delivered to the SOLAR farm - so power up your EV and get moving...



#### CHALLENGE A

### CHARGE UP!

#### You need to:

Create a program named: **M2A**  
**STARTING AT BASE (A1)**, design the program to:  
**MOVE** your EV to **CHARGER (A4)**  
**WAIT** for 3 seconds  
 Return to **BASE (A1)**

**TIP:** This block will give you a 1 second WAIT

wait 1 seconds

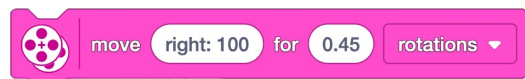
#### CHALLENGE B

### TURBINE CHECK!

#### You need to:

Create a program named: **M2B**  
**STARTING AT BASE (A1)**, design the program to:  
**MOVE** your EV to **WIND (B5)**  
 and then  
 Return to **BASE (A1)**

**TIP:** This block will turn your EV 90 degrees to the right



Developed in partnership with

## CHALLENGE C SUPERCHARGE UP!

### You need to:

Create a program named: **M2C**  
**STARTING AT BASE (A1)**, design the program to:  
**MOVE** your EV to **SUPERCHARGER (D5)**  
**TURN ON** a 'Happy Face' for 3 seconds  
 Return to **BASE (A1)**

**TIP:** This block will give you a 'Happy Face' for 1 second



## CHALLENGE D FULLY CHARGED!

### You need to:

Create a program named: **M2D**  
**STARTING AT BASE (A1)**, design the program to:  
**MOVE** your EV to each **GREEN CHARGER**  
**PLAY** a **SOUND** and **WAIT** at each **CHARGER** for 1 second  
 Return to **BASE (A1)**

**TIP:** This block will play a sound of your choice

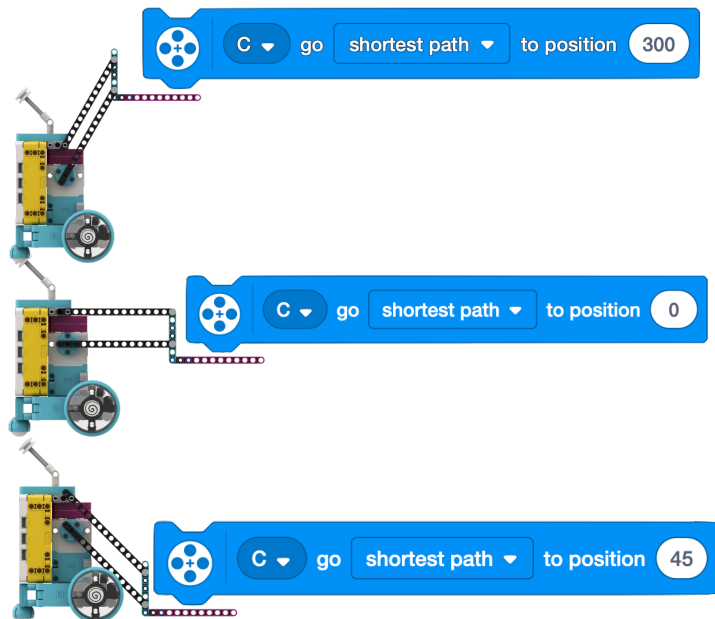


## CHALLENGE E STORAGE TIME!

### You need to:

Create a program named: **M2E**  
**STARTING AT BASE (A1)** with the **SOLAR Panel** on the **EV Lifter**, design the program to:

**MOVE** your EV (carrying the **SOLAR PANEL**) and deliver it to **STORAGE (B1)**  
 Return to **BASE (A1)**

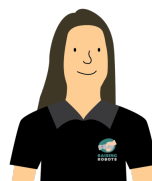


## CHALLENGE F SOLAR POWER!

### You need to:

Create a program named: **M2F**  
**STARTING AT BASE (A1)** with the **SOLAR Panel** on the **EV Lifter**, design the program to:

**MOVE** your EV (carrying the **SOLAR PANEL**) to **SOLAR (D2)**  
 Carefully deliver the **SOLAR PANEL** (aim for the centre of the circle)  
 Return to **BASE (A1)**



## TINKERING TIME...

After completing Challenges A-F successfully, take time to tinker!

### Why not:

- Program your EV to tour the mat and play different sounds and show different LED patterns at each key location?
- Program your EV to perform a celebration dance when it returns to BASE (A1)?