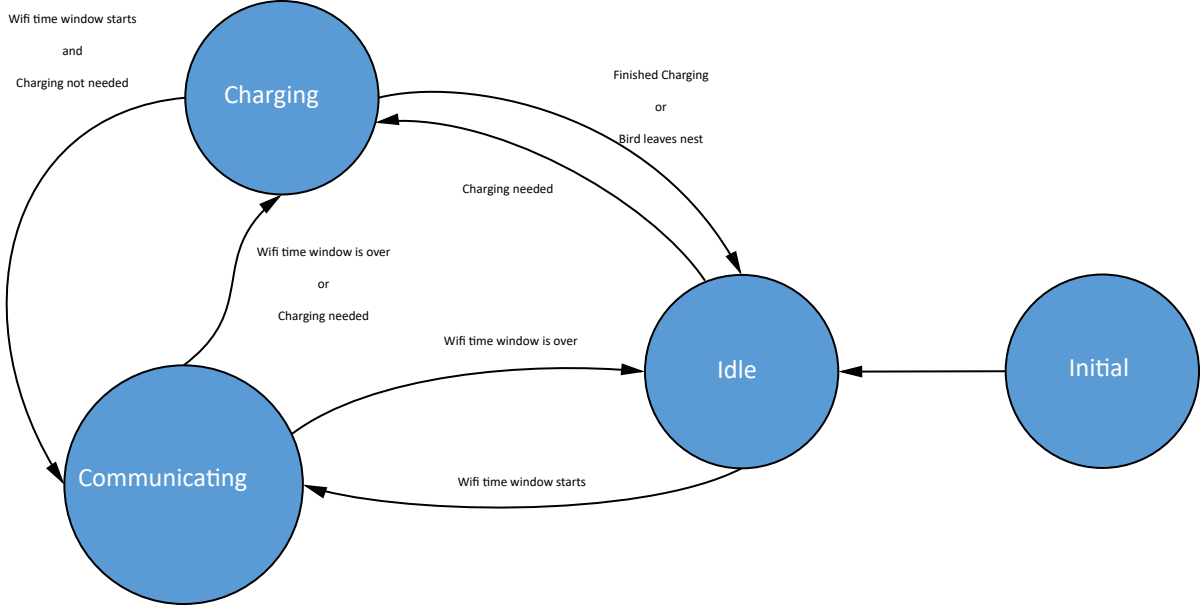
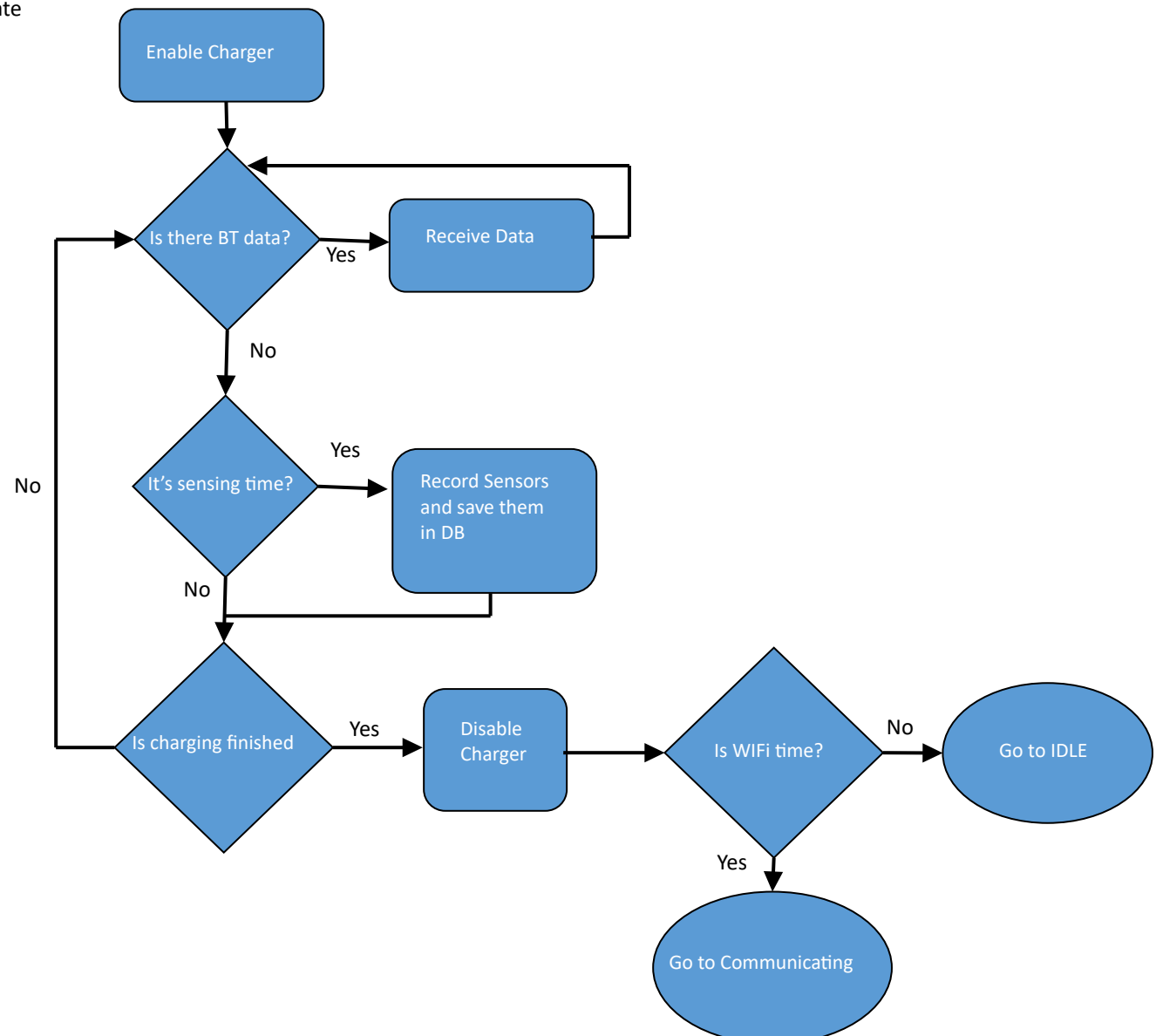
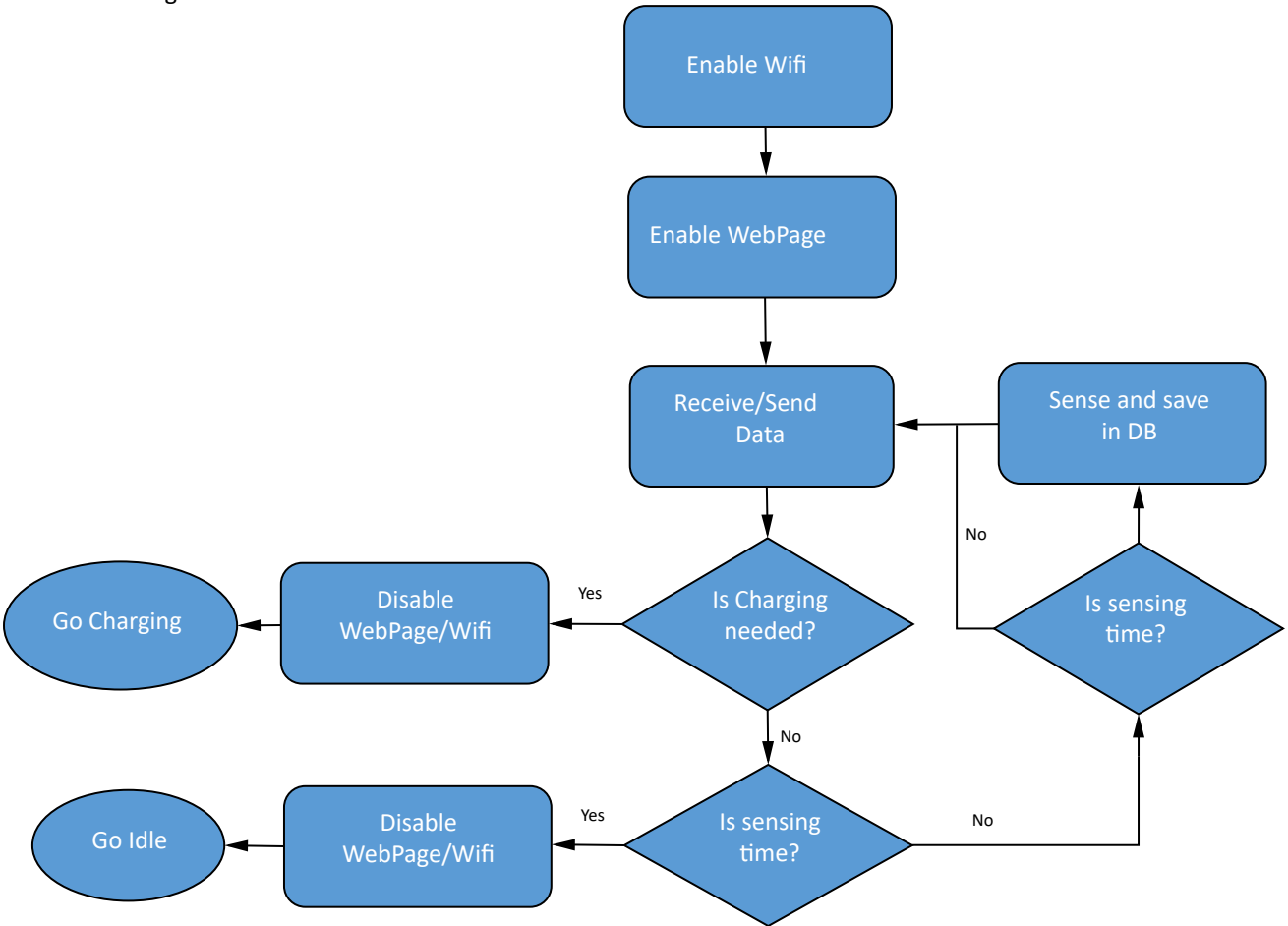

Wifi time window starts
and
Charging not needed
Charging
Finished Charging
or
Bird leaves nest
Charging needed
Wifi time window is over
or
Charging needed
Wifi time window is over
Idle
Initial
Communicating
Wifi time window starts

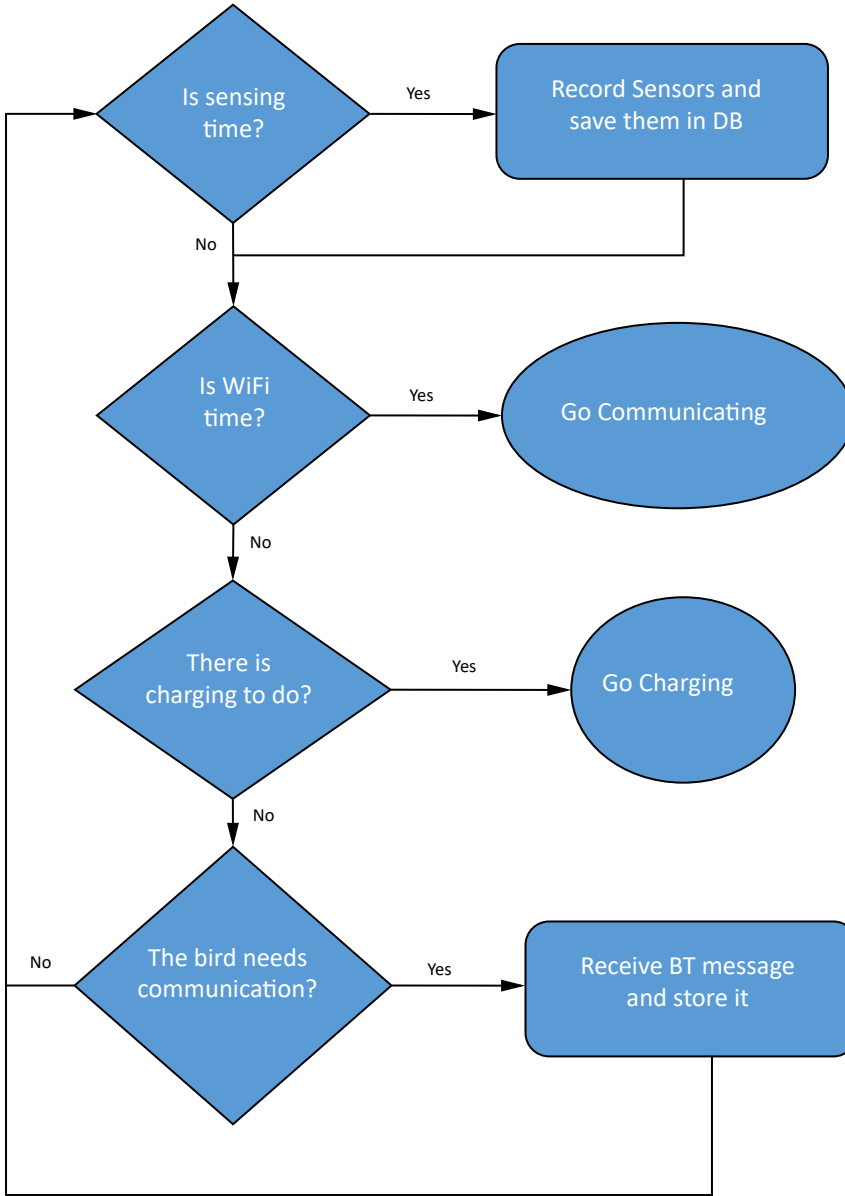
Charging State



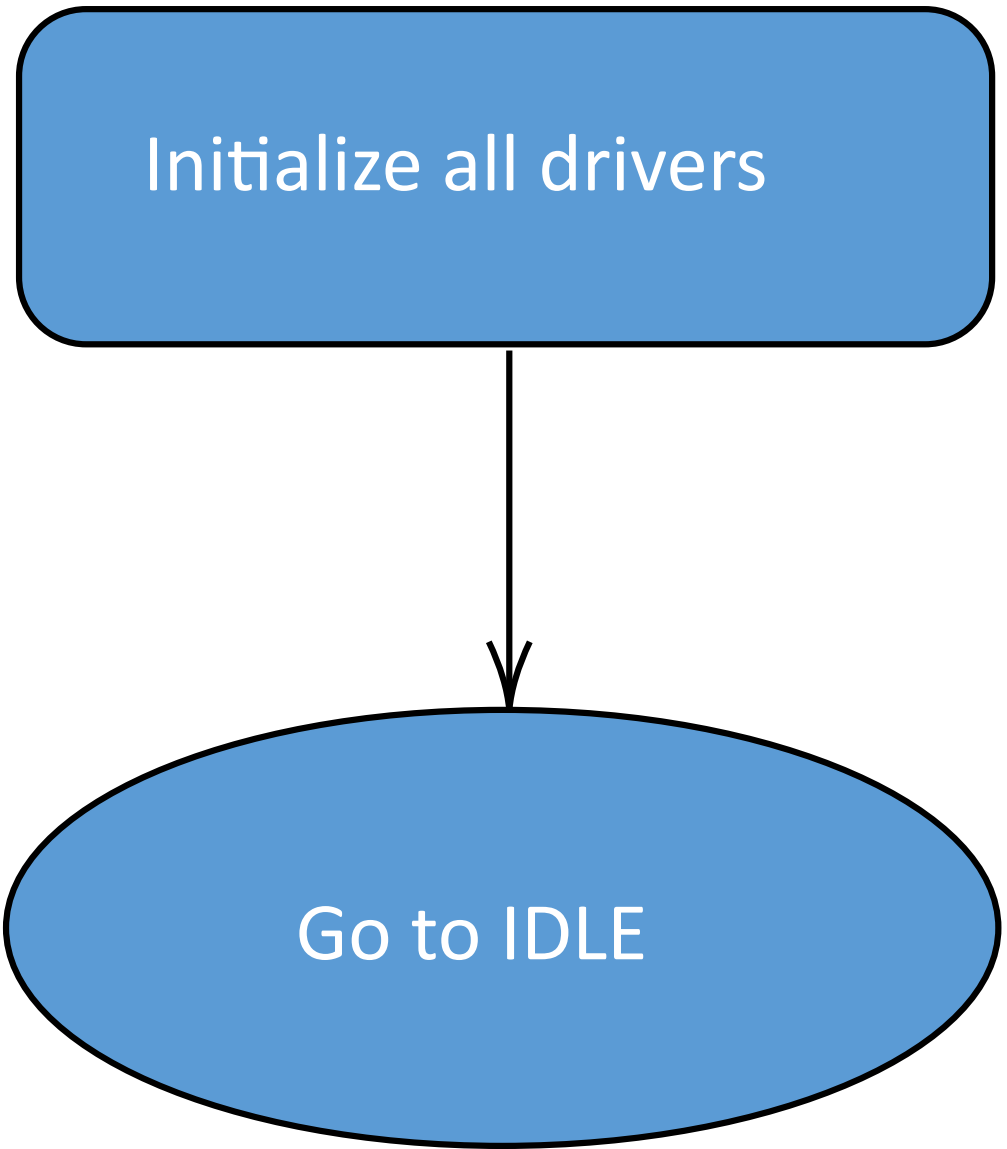
Communicating state

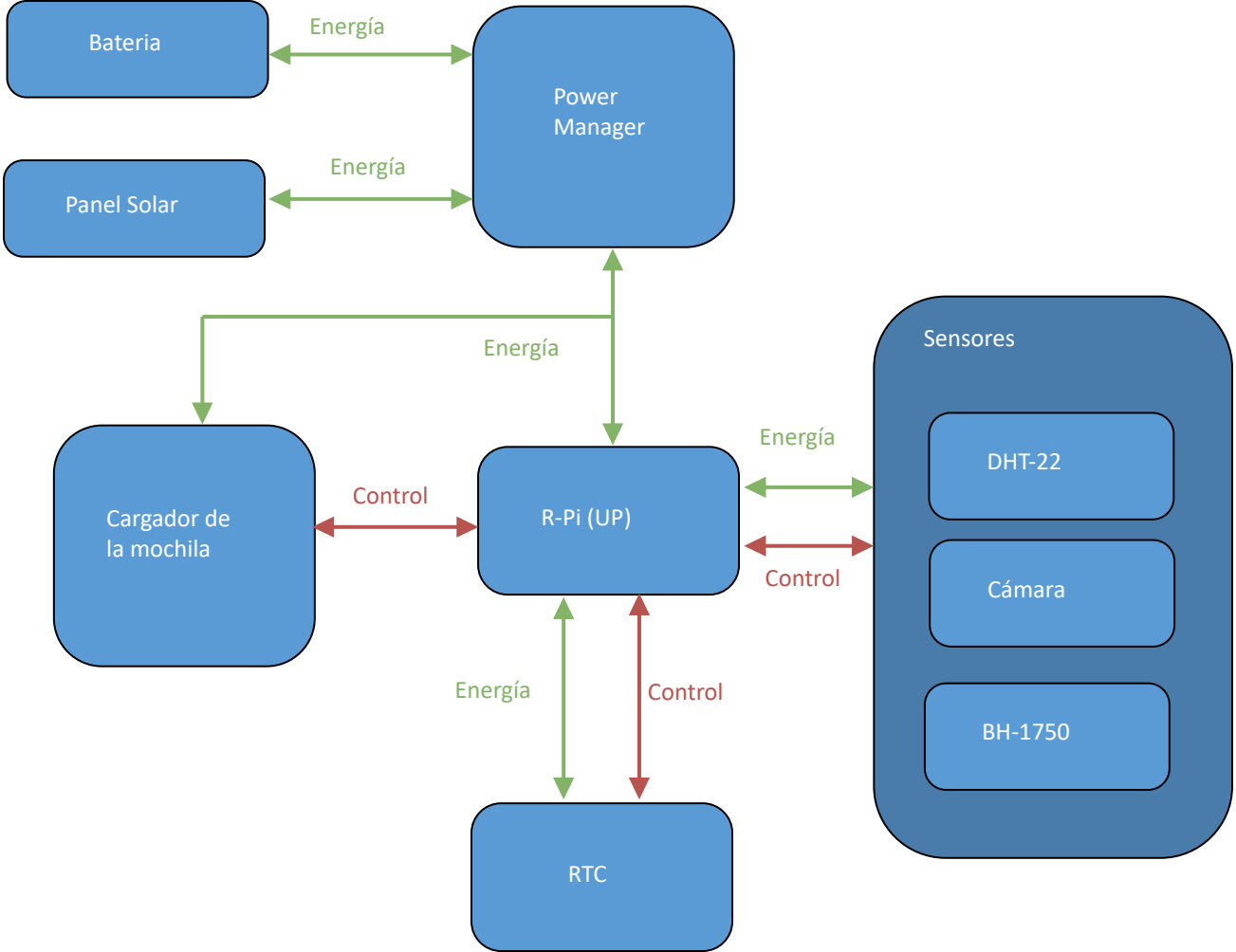


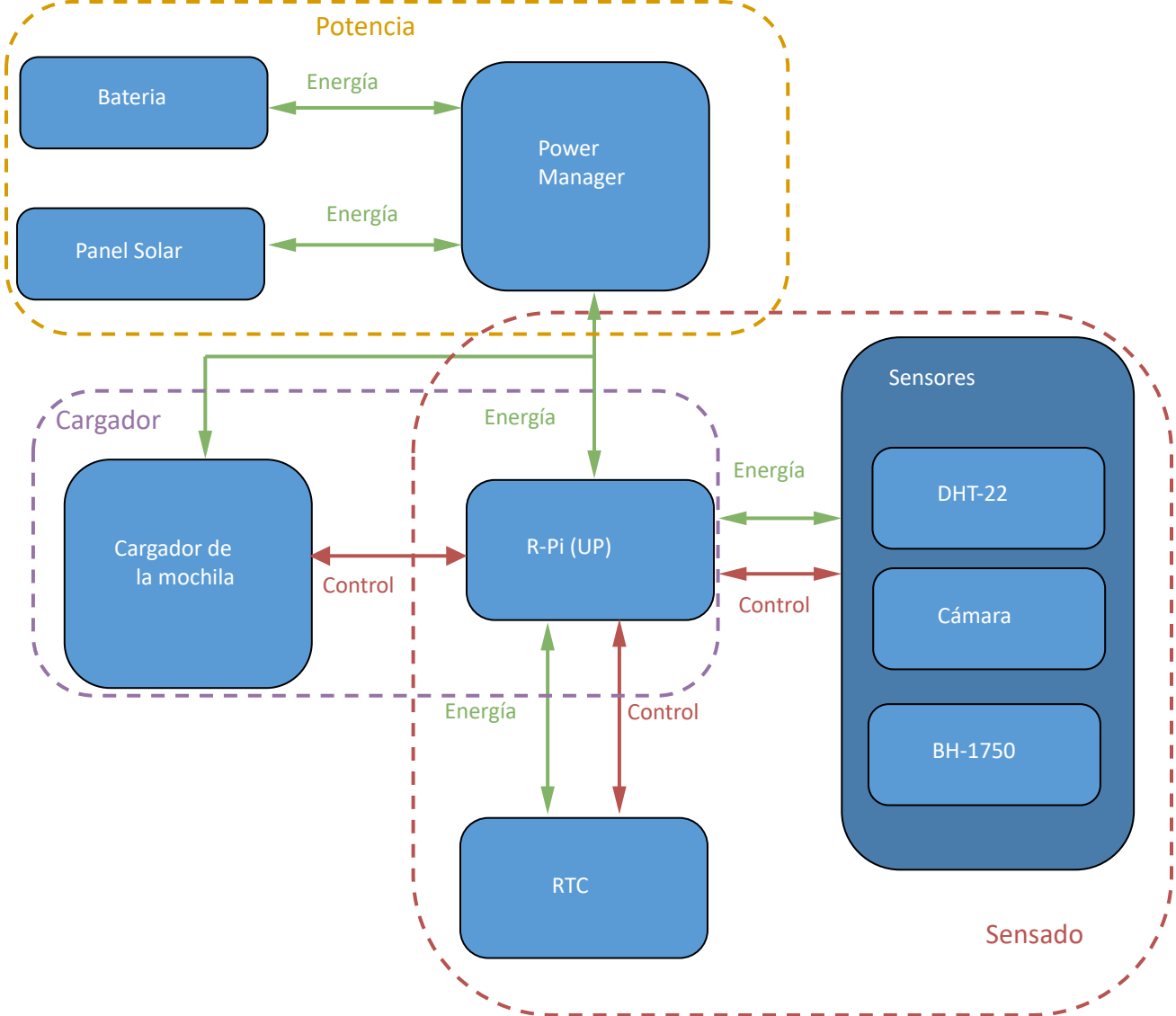
Idle State

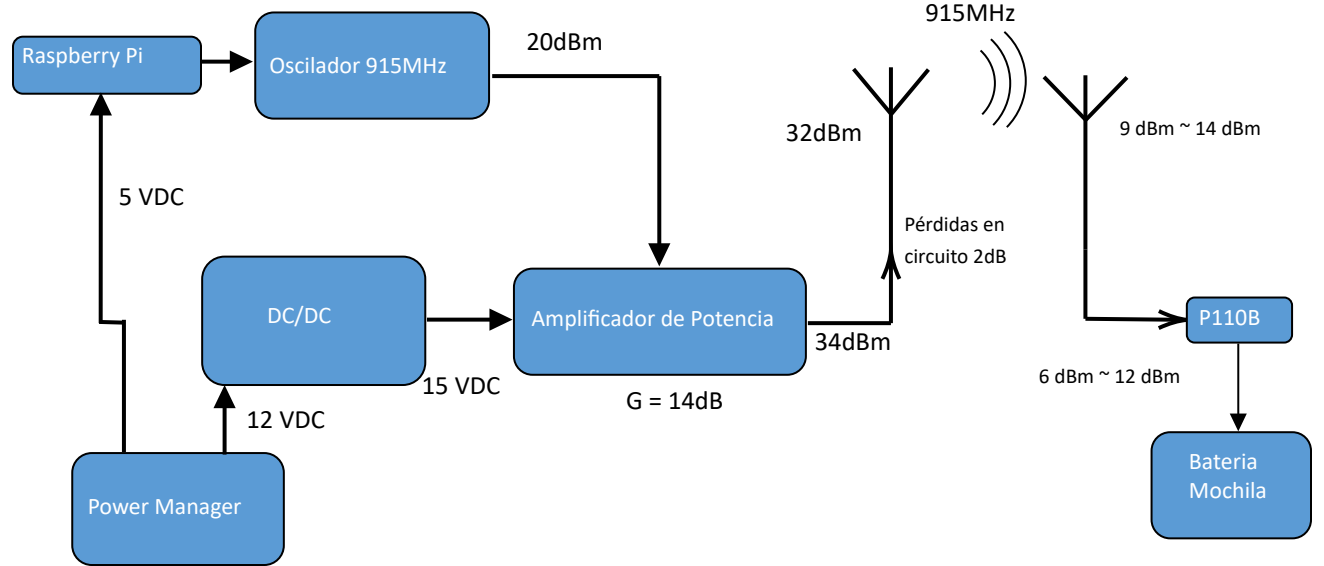

Is sensing time?
Yes
Record Sensors and save them in DB
No
Is WiFi time?
Yes
Go Communicating
No
There is charging to do?
Yes
Go Charging
No
The bird needs communication?
No
Yes
Receive BT message and store it

Initialize State




Bateria
Energía
Power Manager
Panel Solar
Energía
Energía
Sensores
Energía
DHT-22
Cargador de la mochila
Control
R-Pi (UP)
Control
Cámara
Energía
Control
BH-1750
RTC


Potencia
Bateria
Energía
Power
Manager
Panel Solar
Energía
Cargador
Energía
Sensores
Energía
DHT-22
Cargador de
la mochila
Control
R-Pi (UP)
Control
Cámara
Energía
Control
BH-1750
RTC
Sensado


Raspberry Pi
Oscilador 915MHz
20dBm
915MHz
32dBm
9 dBm ~ 14 dBm
5 VDC
Pérdidas en
circuito 2dB
DC/DC
Amplificador de Potencia
P110B
34dBm
15 VDC
G = 14dB
6 dBm ~ 12 dBm
12 VDC
Power Manager
Bateria
Mochila