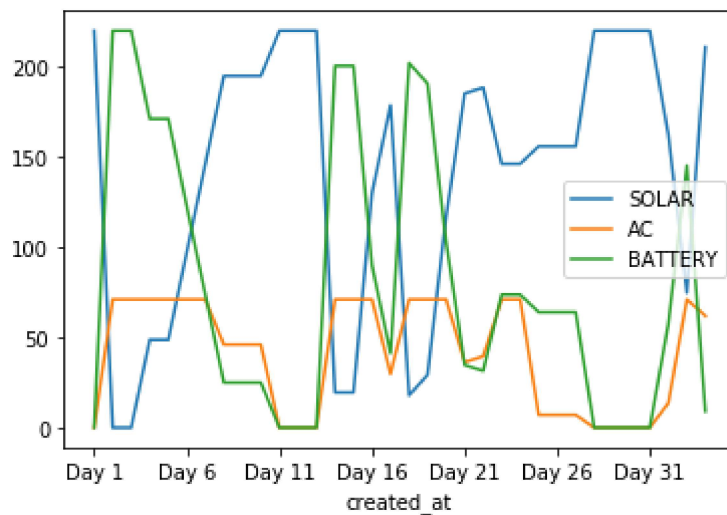


```
In [33]: ▶ """importing csv file and loading the data"""
import pandas as pd
import numpy as np
x1= pd.read_csv('solar_power.csv')
print(x1)
```

	created_at	SOLAR	AC	BATTERY	CREDITS
0	Day 1	220.000	0.000000	0.000	0.000
1	Day 2	0.000	71.073909	220.000	0.000
2	Day 3	0.000	71.073909	220.000	0.000
3	Day 4	48.750	71.073909	171.250	0.000
4	Day 5	48.750	71.073909	171.250	0.000
5	Day 6	97.500	71.073909	122.500	0.000
6	Day 7	146.250	71.073909	73.750	0.000
7	Day 8	195.000	46.073909	25.000	25.000
8	Day 9	195.000	46.073909	25.000	25.000
9	Day 10	195.000	46.073909	25.000	25.000
10	Day 11	220.000	0.000000	0.000	0.000
11	Day 12	220.000	0.000000	0.000	0.000
12	Day 13	220.000	0.000000	0.000	0.000
13	Day 14	19.500	71.073909	200.500	0.000
14	Day 15	19.500	71.073909	200.500	0.000
15	Day 16	130.000	71.073909	90.000	0.000
16	Day 17	178.750	29.823909	41.250	41.250
17	Day 18	17.875	71.073909	202.125	0.000
18	Day 19	29.250	71.073909	190.750	0.000
19	Day 20	117.000	71.073909	103.000	0.000
20	Day 21	185.250	36.323909	34.750	34.750
21	Day 22	188.500	39.573909	31.500	31.500
22	Day 23	146.250	71.073909	73.750	0.000
23	Day 24	146.250	71.073909	73.750	0.000
24	Day 25	156.000	7.073909	64.000	64.000
25	Day 26	156.000	7.073909	64.000	64.000
26	Day 27	156.000	7.073909	64.000	64.000
27	Day 28	220.000	0.000000	0.000	0.000
28	Day 29	220.000	0.000000	0.000	0.000
29	Day 30	220.000	0.000000	0.000	0.000
30	Day 31	220.000	0.000000	0.000	0.000
31	Day 32	162.500	13.573909	57.500	57.500
32	Day 33	74.750	71.073909	145.250	0.000
33	Day 34	210.925	61.998909	9.075	9.075

```
In [6]: """plot of solar,ac and battery columns"""  
import matplotlib.pyplot as plt  
plt.figure(figsize=(20,20))  
x1.plot(x='created_at', y=['SOLAR', 'AC', 'BATTERY'])  
plt.show()
```

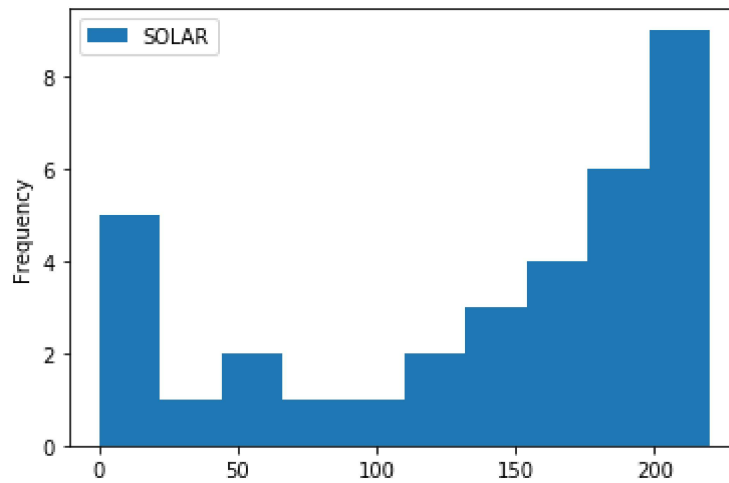
<Figure size 1440x1440 with 0 Axes>



```
In [28]: """maximum value of solar is printed and the histogram is plotted between the
maximum_solar= x1["SOLAR"]
max_value_1 = maximum_solar.max()
print(max_value_1)
plt.figure(figsize=(20,20))
x1.plot.hist(x='created_at', y='SOLAR')
plt.show()
```

220.0

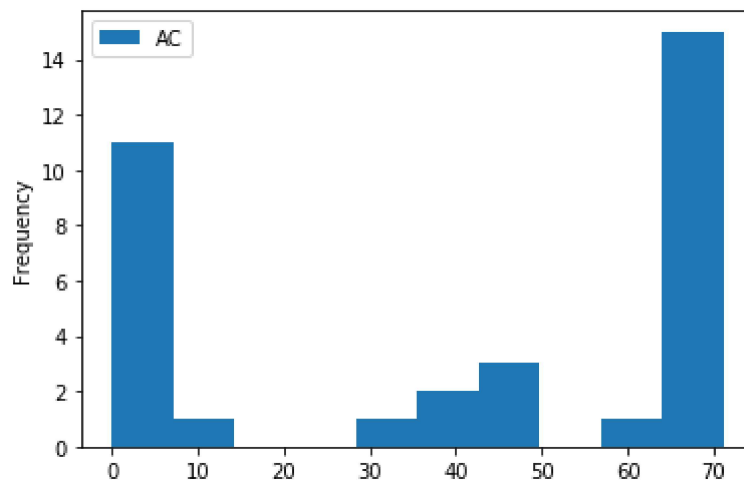
<Figure size 1440x1440 with 0 Axes>



```
In [29]: """maximum value of AC is printed and the histogram is plotted between the da
maximum_ac= x1["AC"]
max_value_2 = maximum_ac.max()
print(max_value_2)
plt.figure(figsize=(20,20))
x1.plot.hist(x='created_at', y='AC')
plt.show()
```

71.073909

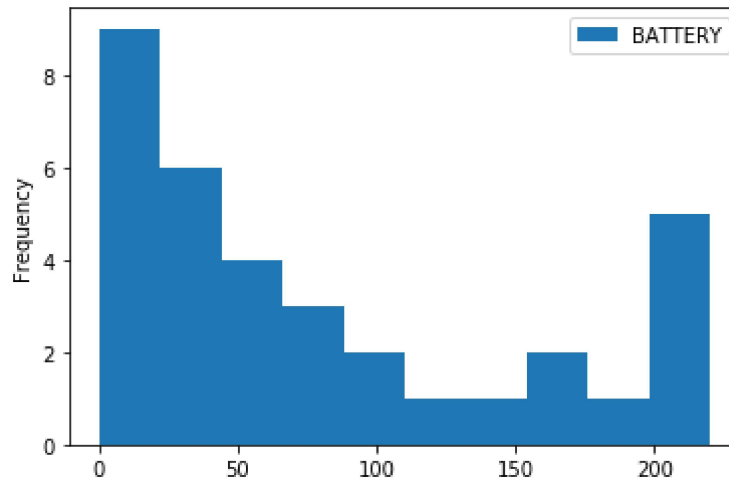
<Figure size 1440x1440 with 0 Axes>



```
In [30]: """maximum value of battery is printed and the histogram is plotted between t
maximum_battery= x1["BATTERY"]
max_value_3 = maximum_battery.max()
print(max_value_3)
plt.figure(figsize=(20,20))
x1.plot.hist(x='created_at', y='BATTERY')
plt.show()
```

220.0

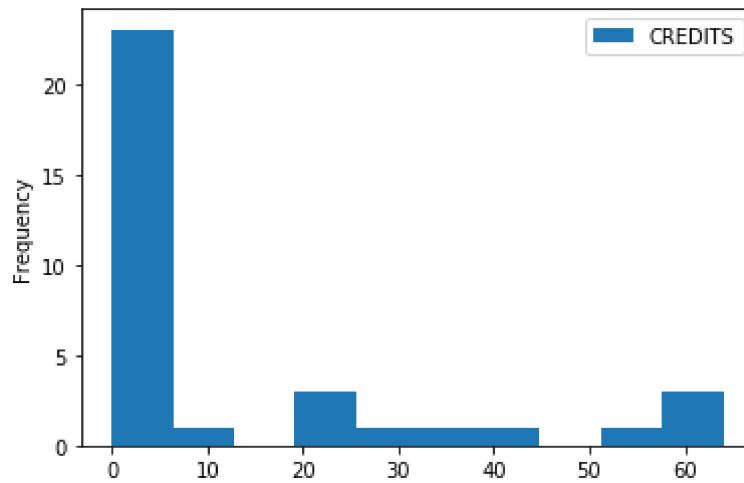
<Figure size 1440x1440 with 0 Axes>



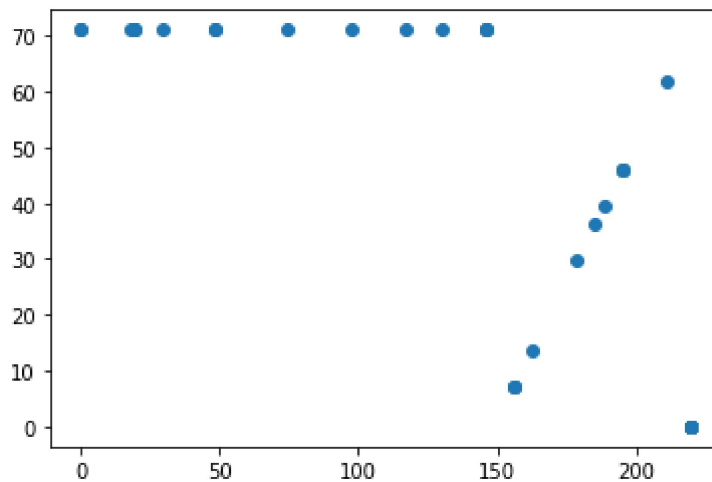
```
In [31]: """maximum value of credits is printed and the histogram is plotted between t
maximum_credits= x1["CREDITS"]
max_value_4 = maximum_credits.max()
print(max_value_4)
plt.figure(figsize=(20,20))
x1.plot.hist(x='created_at', y='CREDITS')
plt.show()
```

64.0

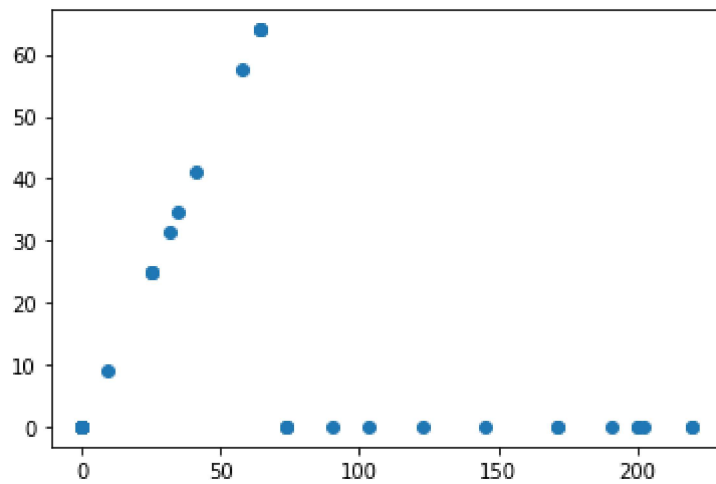
<Figure size 1440x1440 with 0 Axes>



```
In [20]: """scatter plot is plotted between solar energy and AC"""
plt.scatter(maximum_solar,maximum_ac)
plt.show()
```

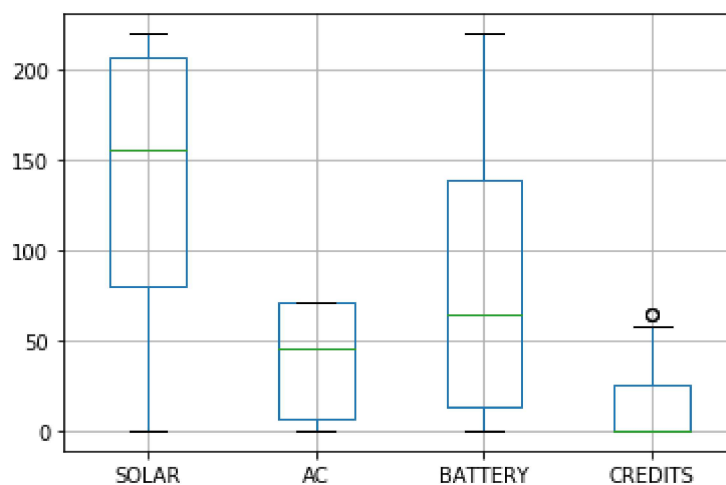


```
In [24]: """scatter plot is plotted between battery energy stored and credits gained"""  
plt.scatter(maximum_battery,maximum_credits)  
plt.show()
```



```
In [26]: """Box plot of all the columns i.e..solar energy,AC,Battery,Credits is plotted  
x1.plot.box(grid='True')
```

Out[26]: <matplotlib.axes._subplots.AxesSubplot at 0x2db747a3808>



```
In [ ]: 
```

