import numpy as np

import matplotlib.pyplot as plt

Load = np.array([])

T = np.arange(0,24)

Load.resize(24)

FileLoad = open('RGR.txt')

for k in T:

Load[k] = float(FileLoad.readline())

FileLoad.close()

Summ=0

for l in T:

Summ= Summ + Load[l]

PowerAverage=Summ/24

PlotPA = PowerAverage+T\*0

LoadMorning = np.delete(Load, range(13,24))

LoadEvening = np.delete(Load, range(0,13))

LoadMorningMax = np.max(LoadMorning)

LoadEveningMax = np.max(LoadEvening)

LoadMin = np.min(Load)

plt.hist(T, 24, weights=Load, histtype='step', color='blue', lw=1.5, alpha=0.8)

plt.plot(T, PlotPA, lw=0.75, color='#40e36b')

print("Потреблено за сутки, кВт: ", Summ)

print("Максимальное потребление за утренние часы, кВт: ", LoadMorningMax)

print("Максимальное потребление за вечерние часы, кВт: ", LoadEveningMax)

print("Минимальное потребление, кВт: ", LoadMin)

plt.ylim(0,65)

plt.xlim(0,23)

plt.xlabel('t, ч')

plt.ylabel('P, кВт')

[plt.show](https://plt.show/)()