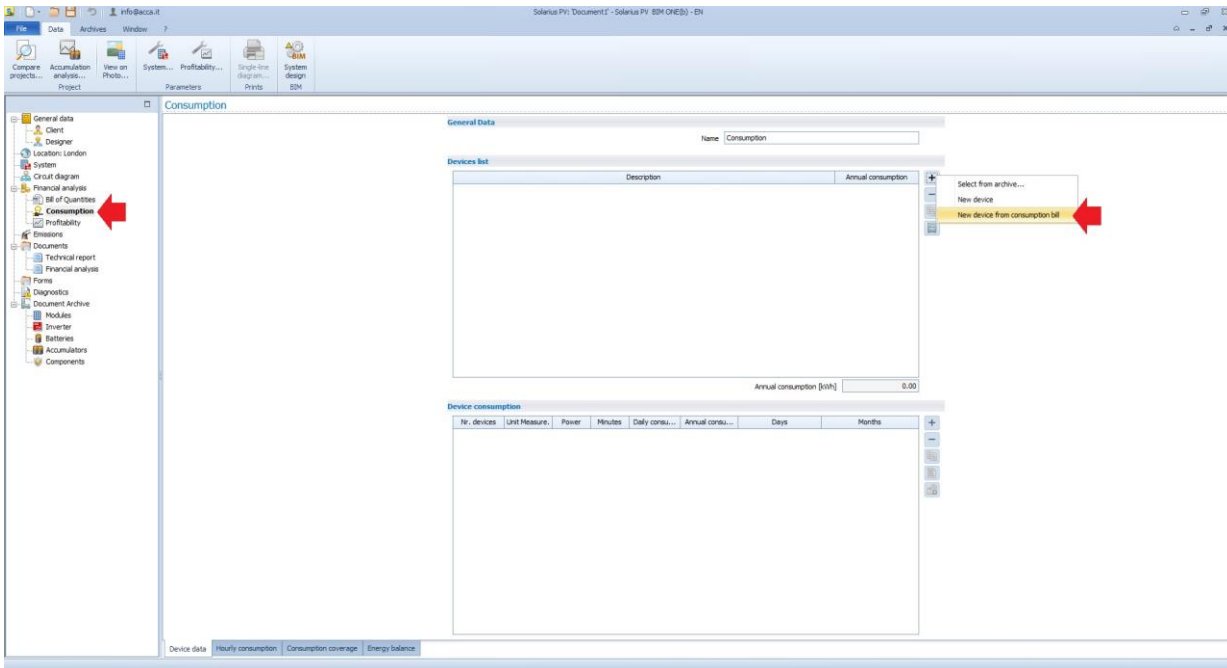


CONSUMPTION FROM DATA BY BAND

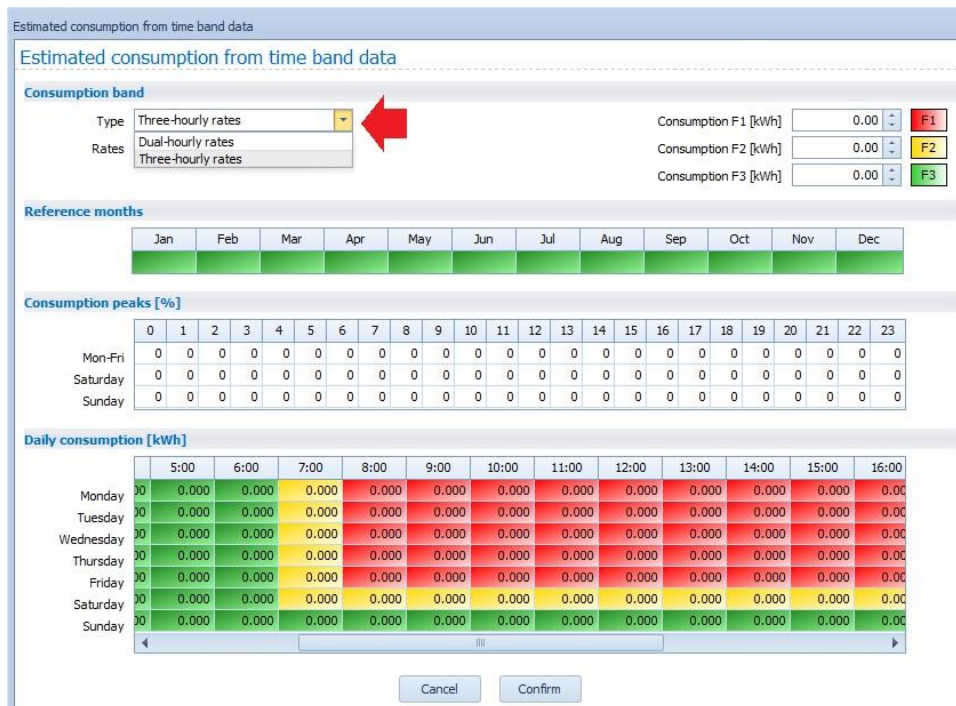
Energy consumption, according to time bands, is managed in the program's "consumption" section.

Let's add a device that identifies the reference period (either monthly, quarterly, yearly, etc.) using the "New device from energy consumption bill..."



Where, in the window "Estimated consumption by data per band" you can choose:

1. The type of band, whether three-hourly or Two-hourly



2. View the time schedule specifications in the "User Archive" and the "Program" Archives.

Estimated consumption from time band data

Estimated consumption from time band data

Consumption band

Type: Consumption F1 [kWh]: F1

Rates: Consumption F2 [kWh]: F2

Reference months

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Consumption peaks [%]

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mon-Fri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Daily consumption [kWh]

		5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00
Monday	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Tuesday	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wednesday	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Thursday	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Friday	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Saturday	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sunday	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000



1

List of time slots

List of time slots

Program Archive User Archive

Name	Type
Dual Hourly	Dual Hourly

Time slots

Name:

Type:

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Monday	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Green	Green	Green	Green
Tuesday	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Green	Green	Green	Green
Wednesday	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Green	Green	Green	Green
Thursday	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Green	Green	Green	Green
Friday	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Green	Green	Green	Green
Saturday	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Sunday	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green

3. Insert the consumptions for three types of time slots: F1, F2 and F3

Estimated consumption from time band data

Estimated consumption from time band data

Consumption band

Type: Three-hourly rates
 Rates: Three-hourly

Consumption F1 [kWh]: 0.00 (F1)
 Consumption F2 [kWh]: 0.00 (F2)
 Consumption F3 [kWh]: 0.00 (F3)

Reference months

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Consumption peaks [%]

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mon-Fri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Daily consumption [kWh]

	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00
Monday	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Tuesday	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wednesday	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Thursday	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Friday	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Saturday	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sunday	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Cancel Confirm

4. Define the "consumption peaks" during the 24 hours and the various days of the week.

Estimated consumption from time band data

Estimated consumption from time band data

Consumption band

Type: Three-hourly rates
 Rates: Three-hourly

Consumption F1 [kWh]: 0.00 (F1)
 Consumption F2 [kWh]: 0.00 (F2)
 Consumption F3 [kWh]: 0.00 (F3)

Reference months

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Consumption peaks [%]

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mon-Fri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Daily consumption [kWh]

	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00
Monday	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Tuesday	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wednesday	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Thursday	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Friday	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Saturday	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sunday	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Cancel Confirm

5. Obtain the "Daily consumption" hours for the various days of the week, divided by the considered time bands.

Estimated consumption from time band data

Estimated consumption from time band data

Consumption band

Type: Three-hourly rates
 Rates: Three-hourly

Consumption F1 [kWh]: 625.00 (F1)
 Consumption F2 [kWh]: 486.00 (F2)
 Consumption F3 [kWh]: 365.00 (F3)

Reference months

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Consumption peaks [%]

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mon-Fri	0	0	0	0	0	0	0	0	0	0	0	30	25	50	0	0	0	0	0	0	0	0	0	0
Saturday	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	60	40	30	0	0	0	0	0	0	0	0

Daily consumption [kWh]

	00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00
Monday	0.096	0.096	0.225	0.199	0.199	0.199	0.258	0.248	0.298	0.199	0.199	0.199	0.096
Tuesday	0.096	0.096	0.225	0.199	0.199	0.199	0.258	0.248	0.298	0.199	0.199	0.199	0.096
Wednesday	0.096	0.096	0.225	0.199	0.199	0.199	0.258	0.248	0.298	0.199	0.199	0.199	0.096
Thursday	0.096	0.096	0.225	0.199	0.199	0.199	0.258	0.248	0.298	0.199	0.199	0.199	0.096
Friday	0.096	0.096	0.225	0.199	0.199	0.199	0.258	0.248	0.298	0.199	0.199	0.199	0.096
Saturday	0.096	0.096	0.225	0.315	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.096
Sunday	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.153	0.134	0.124	0.096	0.096

Cancel Confirm

6. Finally, in the "Consumption" node, you'll get a summary of the "device" consumptions with reference to the daily, annual consumption and the possibility of viewing the "device" details.

Consumption

General Data
 Name: Consumption
 Annual consumption [kWh]: 1 477.45

Devices list

Description	Annual consumption
Consumption Annual - Time Band F1 - F2 - F3	1 477.45

Device consumption

Nr. devices	Unit Measure	Power	Minutes	Daily consu...	Annual consu...	Days	Months
1	kWh	--	--	4.29	1 158.43	Mon - Fri	All
1	kWh	--	--	4.46	231.82	Sat	All
1	kWh	--	--	2.43	126.20	Sun	All

Device consumption

General Data

Device

Nr. devices Unit of measurement

Month (Customized)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

Day (Customized)

Mon	Tue	Wed	Thu	Fri	Sat	Sun

Load profile [%]

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
2.24	2.24	2.24	2.24	2.24	2.24	2.24	5.25	4.64	4.64	4.64	6.02	5.78	6.95	4.64	4.64	4.64	4.64	4.64	5.25	5.25	5.25	5.25	2.24

Hourly consumption

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	
0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.225	0.199	0.199	0.199	0.258
12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	
0.248	0.298	0.199	0.199	0.199	0.199	0.199	0.225	0.225	0.225	0.225	0.096	

Total

Daily consumption [kWh] Annual consumption [kWh]

Example (Consumption by monthly range)

The example below shows a description of how to define a consumption by time-band relating to a single month. It shows the result of "Daily consumptions" in detail highlighting any consumption peaks if present. The operating procedures are as follows:

A) DAILY CONSUMPTION IN ABSENCE OF CONSUMPTION PEAKS

- A new device is added using the "New device from energy consumption bill" feature.
- Consumption by types F1 = 1000, F2 = 500, F3 = 200 are shown
- Only the month to be considered is activated, for example "November" (in this case November is highlighted in green, all others are in red)

Estimated consumption from time band data

Estimated consumption from time band data

Consumption band

Type: Three-hourly rates
Rates: Three-hourly

Consumption F1 [kWh]: 1 000.00 (F1)
Consumption F2 [kWh]: 500.00 (F2)
Consumption F3 [kWh]: 200.00 (F3)

Reference months

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Consumption peaks [%]

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mon-Fri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Daily consumption [kWh]

	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00
Monday	0.658	0.658	0.658	2.874	4.132	4.132	4.132	4.132	4.132	4.132	4.132	4.132
Tuesday	0.658	0.658	0.658	2.874	4.132	4.132	4.132	4.132	4.132	4.132	4.132	4.132
Wednesday	0.658	0.658	0.658	2.874	4.132	4.132	4.132	4.132	4.132	4.132	4.132	4.132
Thursday	0.658	0.658	0.658	2.874	4.132	4.132	4.132	4.132	4.132	4.132	4.132	4.132
Friday	0.658	0.658	0.658	2.874	4.132	4.132	4.132	4.132	4.132	4.132	4.132	4.132
Saturday	0.658	0.658	0.658	2.874	2.874	2.874	2.874	2.874	2.874	2.874	2.874	2.874
Sunday	0.658	0.658	0.658	0.658	0.658	0.658	0.658	0.658	0.658	0.658	0.658	0.658

Cancel Confirm

- Once completed the previous operations, as a result we obtain the carta s shown in the previous image, where for example, in Band F1, the value of 4,132 kWh is obtained according to the calculation illustrated below:

The calculation parameters used are:

- No. 52 weeks in a year
- N. 5 working days (Monday - Friday) in a week
- N. 2 holidays (Saturday and Sunday) in a week

- Calculation of hourly consumption levels considering F1 range $\rightarrow (1000 \text{ kWh}/22 \text{ days}) = 45.45 \text{ kWh/day}$, where 22 represents the weekdays for the month of November (*)
- Calculation of hourly consumption levels considering F1 range $\rightarrow (45.45 \text{ kWh}/11) = 4.13 \text{ kWh}$, where 11 represents the hours used in the F1 band

...in the same manner we can get the daily values for time bands F2 and F3.

B) DAILY CONSUMPTION WITH THE PRESENCE OF CONSUMPTION PEAKS

The presence of daily consumption peaks are entered manually with a value ranging from 0 to 100%.

For example, we can define a consumption peak at 12:00 on all weekdays, equal to 50% (see box in the image below).

All this will lead to a breakdown of consumptions. For example, we can get 3,593 kWh for time slots not affected by the peak consumption and a value of 5,929 kWh per peak at noon and calculated as follows:

Time of peak consumption calculation range F1 at **12:00pm $\rightarrow (3.953 * 1.5 = 5,929 \text{ kWh})$** ie the hourly consumption, with the presence of the peak, increased by 50% more.

(*) the reference year considered in the calculation is 2007.

Estimated consumption from time band data

Estimated consumption from time band data

Consumption band

Type: Three-hourly rates
 Rates: Three-hourly

Consumption F1 [kWh]: 1 000.00 (F1)
 Consumption F2 [kWh]: 500.00 (F2)
 Consumption F3 [kWh]: 200.00 (F3)

Reference months

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Consumption peaks [%]

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mon-Fri	0	0	0	0	0	0	0	0	0	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0
Saturday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Daily consumption [kWh]

	0	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00
Monday	0.658	0.658	0.658	2.874	3.953	3.953	3.953	3.953	5.929	3.953	3.953	3.953	3.953
Tuesday	0.658	0.658	0.658	2.874	3.953	3.953	3.953	3.953	5.929	3.953	3.953	3.953	3.953
Wednesday	0.658	0.658	0.658	2.874	3.953	3.953	3.953	3.953	5.929	3.953	3.953	3.953	3.953
Thursday	0.658	0.658	0.658	2.874	3.953	3.953	3.953	3.953	5.929	3.953	3.953	3.953	3.953
Friday	0.658	0.658	0.658	2.874	3.953	3.953	3.953	3.953	5.929	3.953	3.953	3.953	3.953
Saturday	0.658	0.658	0.658	2.874	2.874	2.874	2.874	2.874	2.874	2.874	2.874	2.874	2.874
Sunday	0.658	0.658	0.658	0.658	0.658	0.658	0.658	0.658	0.658	0.658	0.658	0.658	0.658

Cancel Confirm