Fuel Consumption Forecasting

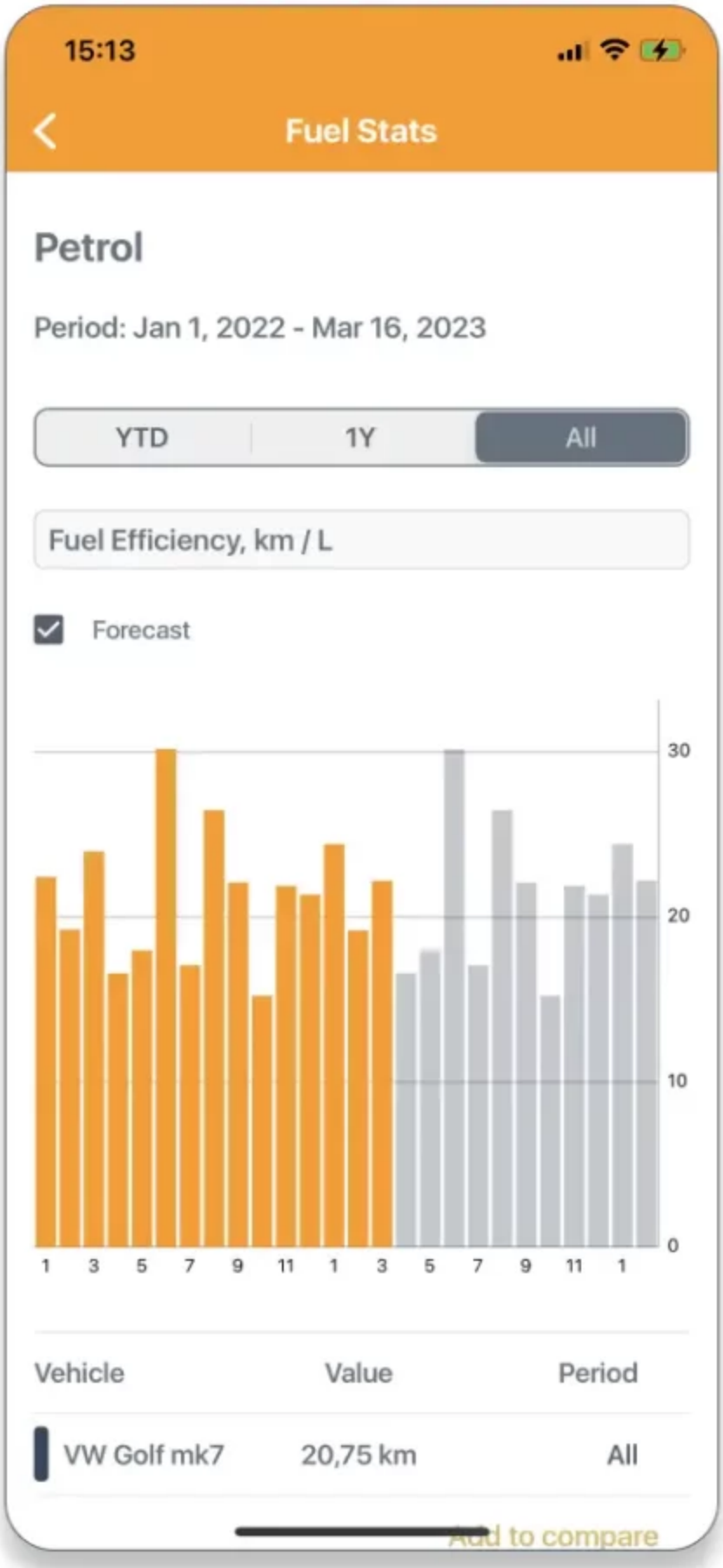
Fuel Tracking · https://arba.app/userguide/fuel-forecast/

Fuel consumption forecasting is based on mileage prediction (**D**), which is calculated using a machine learning method with an additive model and the MCMC (Markov Chain Monte Carlo) algorithm. The model is trained considering trends, seasonality factors, and a series of regressive components.

E - Efficiency

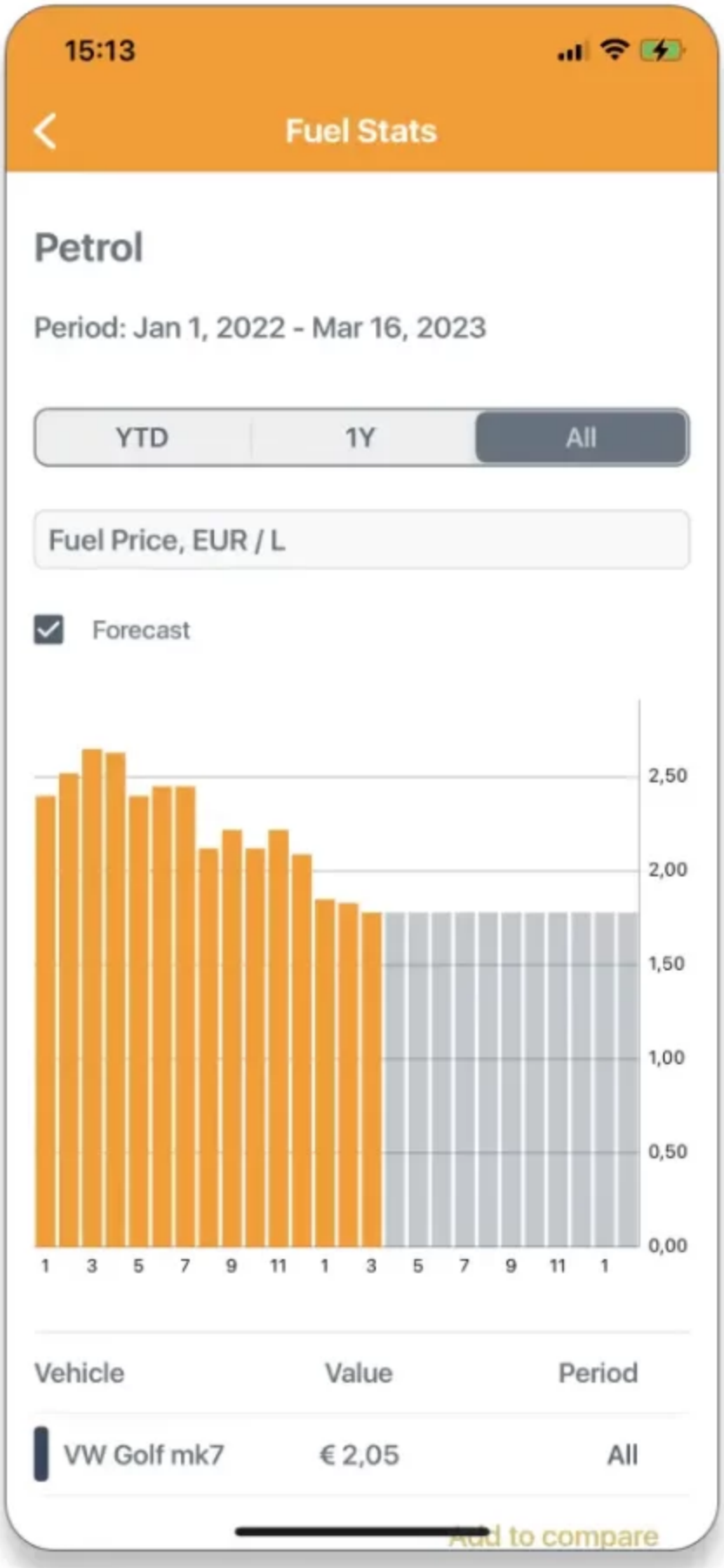
If there is more than 12 months of full history in the app, the current value is used for each predicted month. July is copied to July, and December to December. This allows for the most accurate consideration of seasonal changes in your car's fuel consumption.

If the history is less than 12 months, the app calculates the average value and applies it to the entire predicted period. In this case, the seasonal factor is not taken into account.


15:13
Fuel Stats
Petrol
Period: Jan 1, 2022 - Mar 16, 2023
YTD
1Y
All
Fuel Efficiency, km / L
Forecast
30
20
10
0
1 3 5 7 9 11 1 3 5 7 9 11 1
Vehicle
Value
Period
VW Golf mk7
20,75 km
All
Add to compare

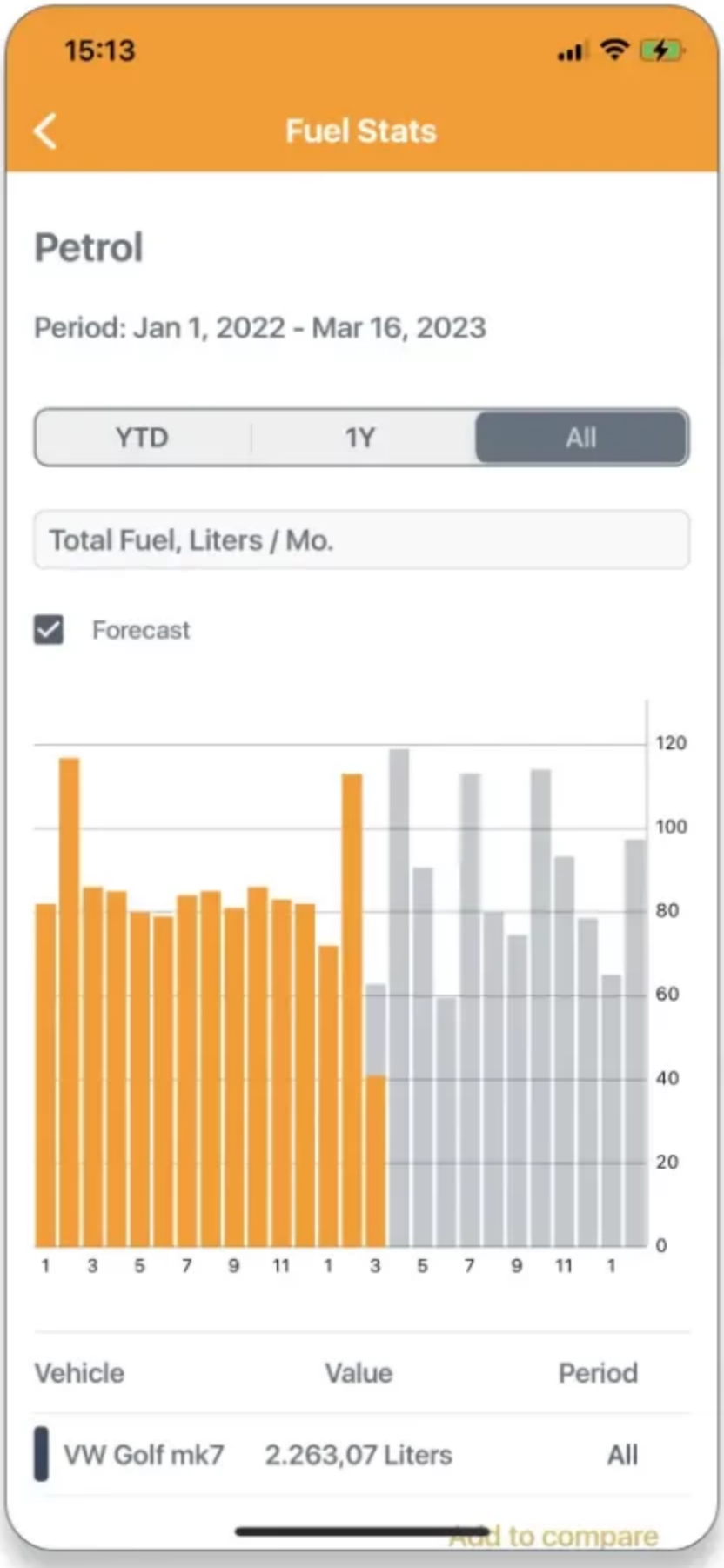
P - Price

The ARBA Auto app does not attempt to predict changes in fuel and electricity prices. The last (current) non-zero price at which you purchased fuel or electricity is used for all calculations.


15:13
Fuel Stats
Petrol
Period: Jan 1, 2022 - Mar 16, 2023
YTD
1Y
All
Fuel Price, EUR / L
Forecast
2,50
2,00
1,50
1,00
0,50
0,00
1 3 5 7 9 11 1 3 5 7 9 11 1
Vehicle
Value
Period
VW Golf mk7
€ 2,05
All
Add to compare

T - Total Fuel (Charged)

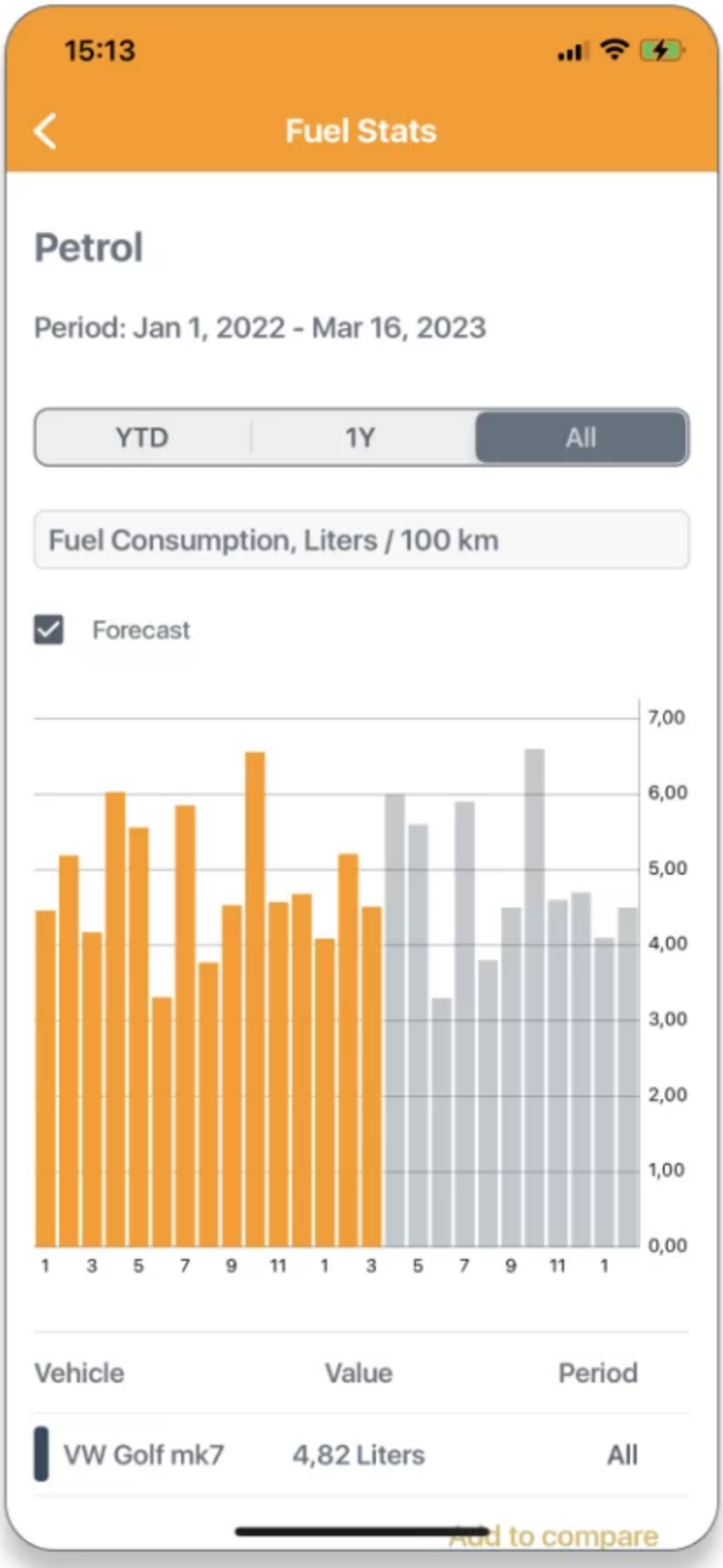
The amount of fuel needed to travel the predicted distance is calculated by the formula: **T = D / E**; Where D is the distance, and E is the fuel efficiency.


15:13
Fuel Stats
Petrol
Period: Jan 1, 2022 - Mar 16, 2023
YTD
1Y
All
Total Fuel, Liters / Mo.
Forecast
120
100
80
60
40
20
0
1 3 5 7 9 11 1 3 5 7 9 11 1
Vehicle
Value
Period
VW Golf mk7
2.263,07 Liters
All
Add to compare

FC - Fuel (Energy) consumption

The fuel consumption forecast is calculated by the formula: **FC = T / D * 100**

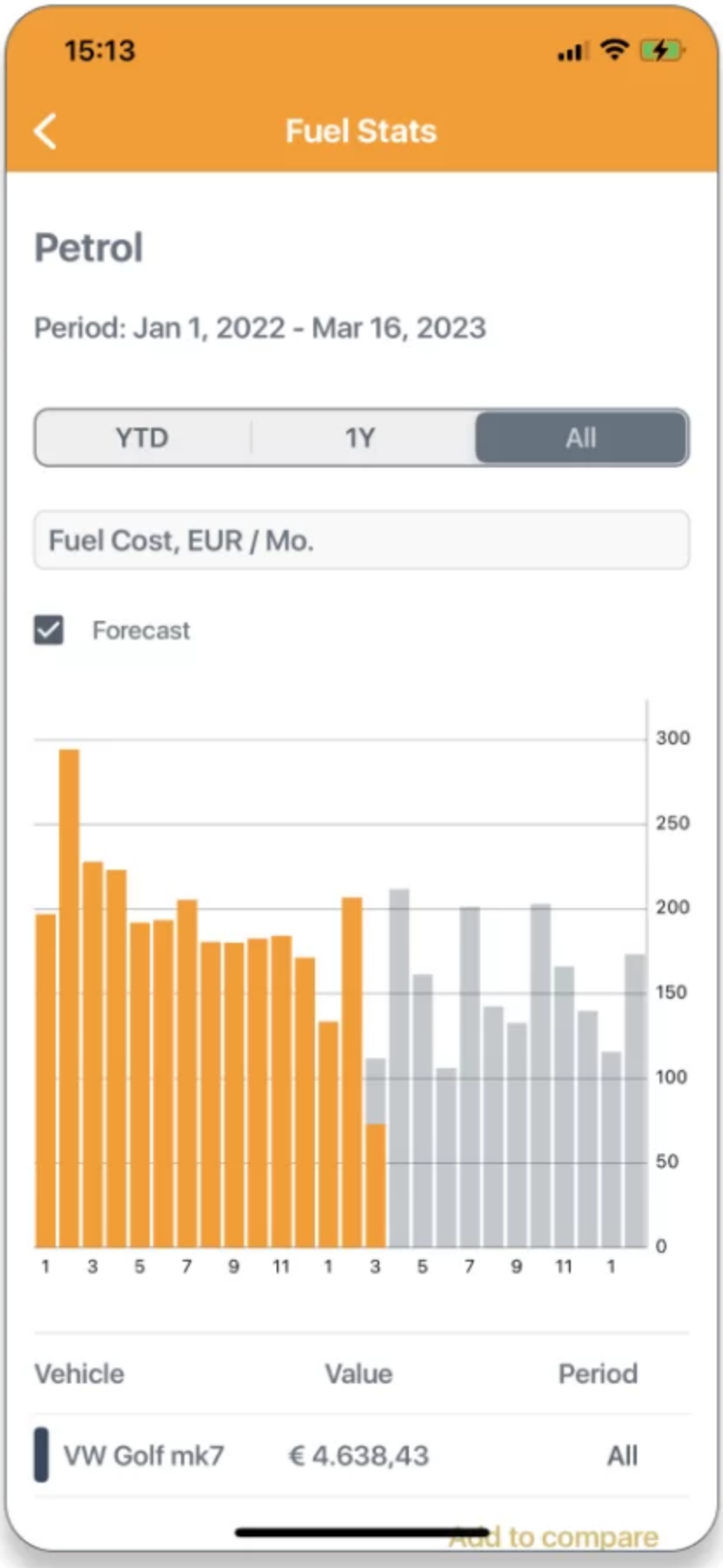
Where T is the amount of fuel, and D is the distance.


15:13
Fuel Stats
Petrol
Period: Jan 1, 2022 - Mar 16, 2023
YTD
1Y
All
Fuel Consumption, Liters / 100 km
Forecast
7,00
6,00
5,00
4,00
3,00
2,00
1,00
0,00
1 3 5 7 9 11 1 3 5 7 9 11 1
Vehicle
Value
Period
VW Golf mk7
4,82 Liters
All
Add to compare

A - Total Spent (Fuel /energy expenses)

Calculated by the formula: **A = T * P**

Where T is the amount of fuel, and P is the price.


15:13
Fuel Stats
Petrol
Period: Jan 1, 2022 - Mar 16, 2023
YTD
1Y
All
Fuel Cost, EUR / Mo.
Forecast
300
250
200
150
100
50
0
1 3 5 7 9 11 1 3 5 7 9 11 1
Vehicle
Value
Period
VW Golf mk7
€ 4.638,43
All
Add to compare

C - Trip cost (Cost per km/mi)

The trip cost is calculated by the formula: **C = A / D**

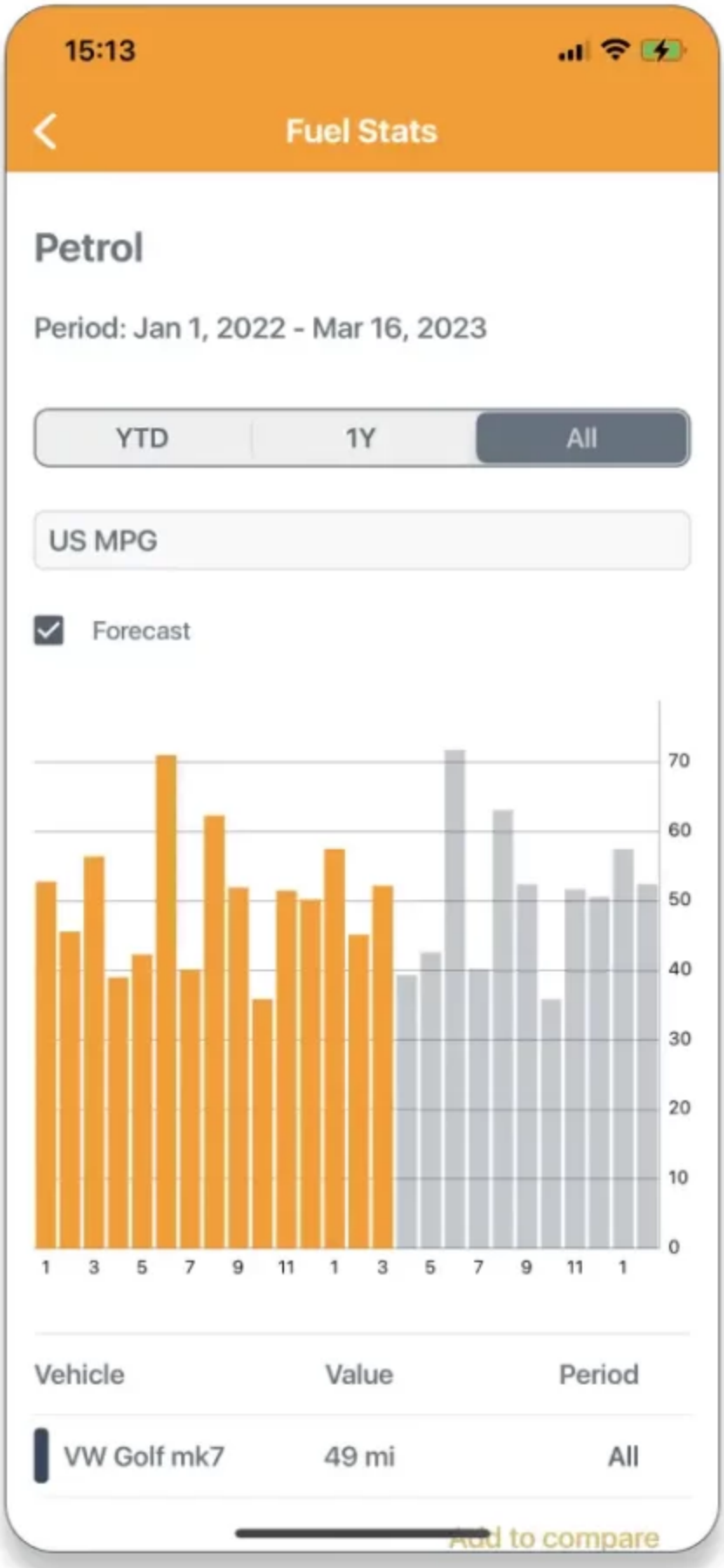
Where A is the fuel expenses, and D is the distance.


15:13
Fuel Stats
Petrol
Period: Jan 1, 2022 - Mar 16, 2023
YTD
1Y
All
Cost per km, EUR / km
Forecast
0,15
0,12
0,09
0,06
0,03
0,00
1 3 5 7 9 11 1 3 5 7 9 11 1
Vehicle
Value
Period
VW Golf mk7
€ 0,1
All
Add to compare

US MPG - How many miles a car travels using 1 gallon of fuel

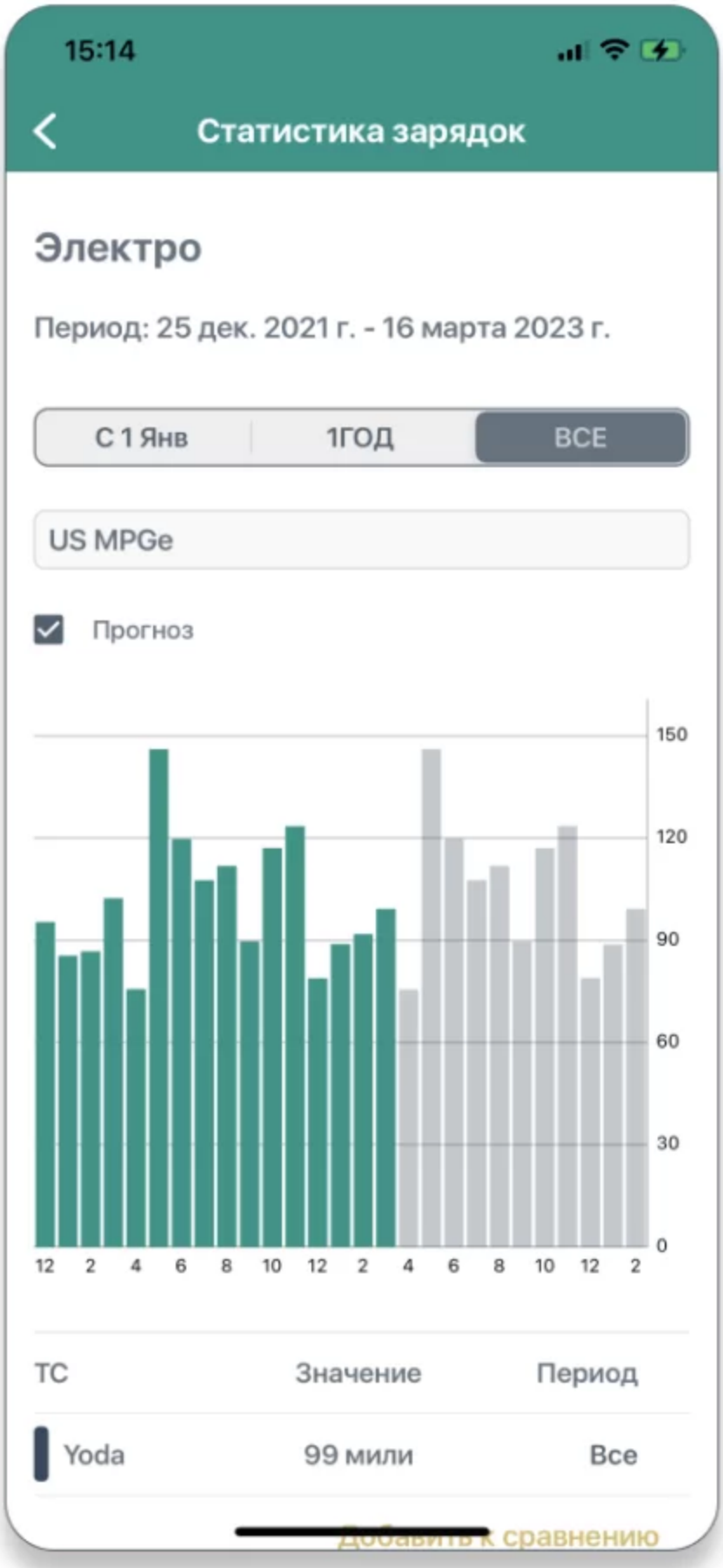
For the US, this is calculated by the standard formula: **US MPG = D / T**,

Where D is the distance, and T is the total fuel input. For all other countries, a conversion from the metric system is additionally applied.


15:13
Fuel Stats
Petrol
Period: Jan 1, 2022 - Mar 16, 2023
YTD
1Y
All
US MPG
Forecast
70
60
50
40
30
20
10
0
1 3 5 7 9 11 1 3 5 7 9 11 1
Vehicle
Value
Period
VW Golf mk7
49 mi
All
Add to compare

US MPGe - Equivalent to the US MPG indicator for electric vehicles

The indicator is calculated based on data D (distance) and T (total purchased electricity) with subsequent conversion of kWh to gallons and translation from the metric system. Here you will find a calculator that applies this formula. You can experiment with your car's values.


15:14
Статистика зарядок
Электро
Период: 25 дек. 2021 г. - 16 марта 2023 г.
С 1 Янв
1ГОД
ВСЕ
US MPGe
Прогноз
150
120
90
60
30
0
12 2 4 6 8 10 12 2 4 6 8 10 12 2
ТС
Значение
Период
Yoda
99 мили
Все
Добавить к сравнению

MPGe

Read more about the forecast feature in our blog.