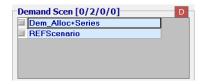
Demand projection in VEDA-FE

The energy service demands in VEDA FE are projected with this formula:

DEM (t+1) = DEM (Base Year) * Driver (t+1)
$$^{\text{Sensitivity}}$$

This is an example from the training models

- 1) Drivers growth and allocation are saved in demand scenario files as shown in the next figure:
 - Driver growth scenario file REFScenario (it is possible to change workbook name)
 - Derivers allocation scenario Dem_Alloc+Series (fixed workbook name)



2) Scenario file REFScenario



This table is used to declare the demand drivers growth (based on 2005 that is the base year in this example) by region.

- 3) Scenario file Dem_Alloc+Series
 - Sheet DriverAllocation to allocate drivers energy service demands and the driver exponent in the sensitivity column. The calibration column is not used.

~DRVR_Allocation	i			
Region	Demand	Driver	Calibration	Sensitivity
REG1	DTCAR	GDP		CONSTANT
REG2	DTCAR	GDP		CONSTANT

- Sheet Series to define the exponent values

~Series					
Series	\~2005	\~2006	\~2010	\~2015	\~2020
Constant	1.0	1.0	1.0	1.0	1.0

4) Results from VEDA-FE



The 2005 value is the base year value defined in the year template.

I tried to project this demand in an external xIs file and I got the same values.

	F13	▼ (**	<i>f</i> _∞ =E4*F10						
	А	В	С	D	Е	F	G	Н	I
1						Base Year Demand			
2		From VEDA-FE						J	
3		Commodity	Region	Scenario\Year	2005	2006	2010	2015	2020
4		DTCAR	REG1	BASE	1950				
5		DTCAR	REG1	REFScenario		1969.74	2047.75	2145.26	2340.29
6									
7									
8		Manually							
9					\~ 200 5	\~ <mark>200</mark> 6	\~2010	\~ 2015	\~2020
10			REG1	GDP	1.00	1.01	1.05	1.10	1.20
11									
12									
13			Manual projection	(the exponent is 1)		1969.74	2047.75	2145.26	2340.29
14									