Scenario analysis

in LEAP

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- Add Scenarios
- Insert scenario assumptions
  - Use of expressions
- Show Results
  - Eight (8) steps to view/edit/export

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Basics

Scenario analysis: a method for decision-making

Scenarios

- are self-consistent story-lines of how an energy system might evolve over time in a particular socio-economic and policy setting.
- encompass any factor that can change over time, because of particular policy interventions and different socio-economic conditions.
- share a common set of *Current Accounts* data.
- run from the First Scenario Year to the End Year of the study.

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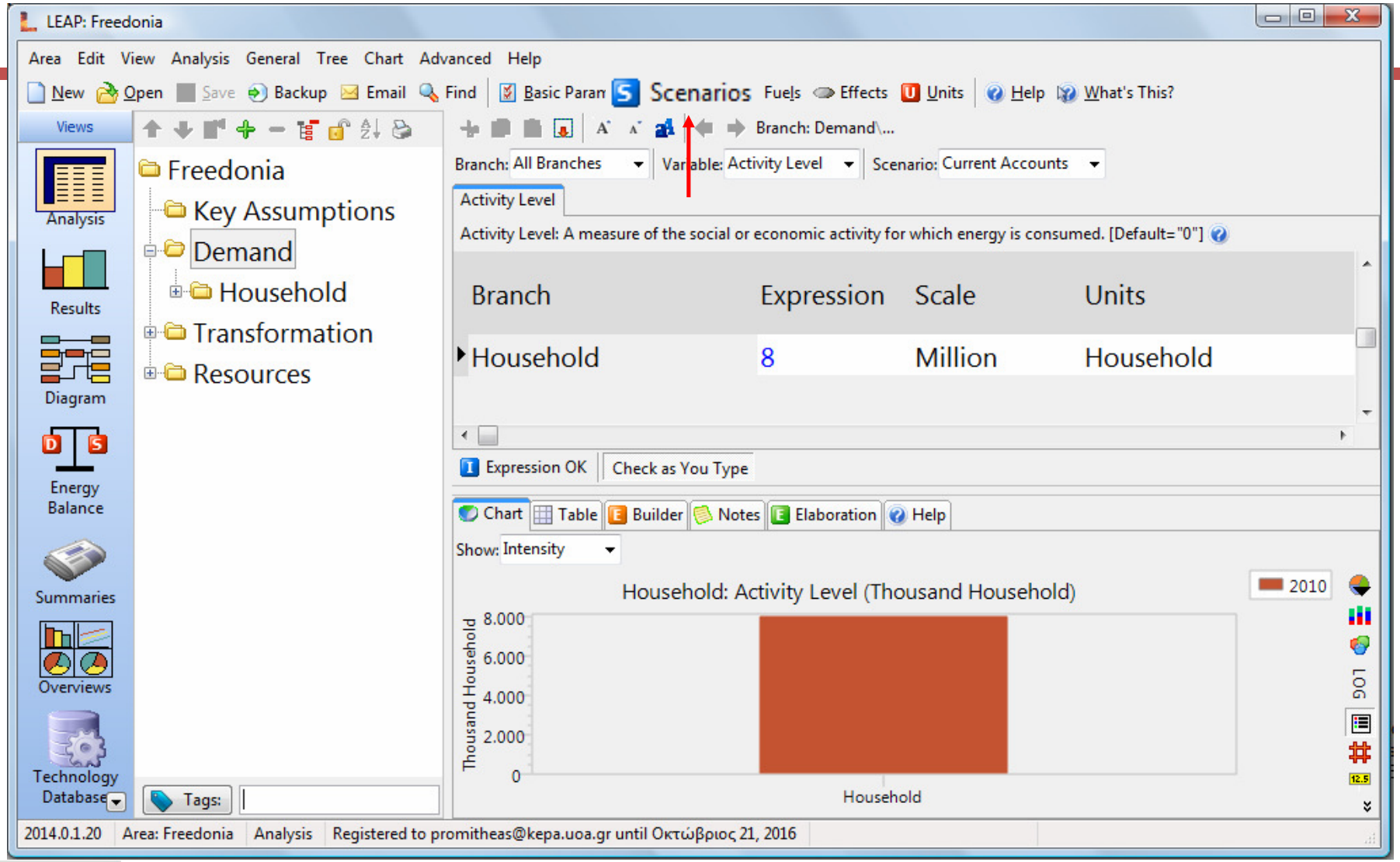
Add scenarios (1/2)



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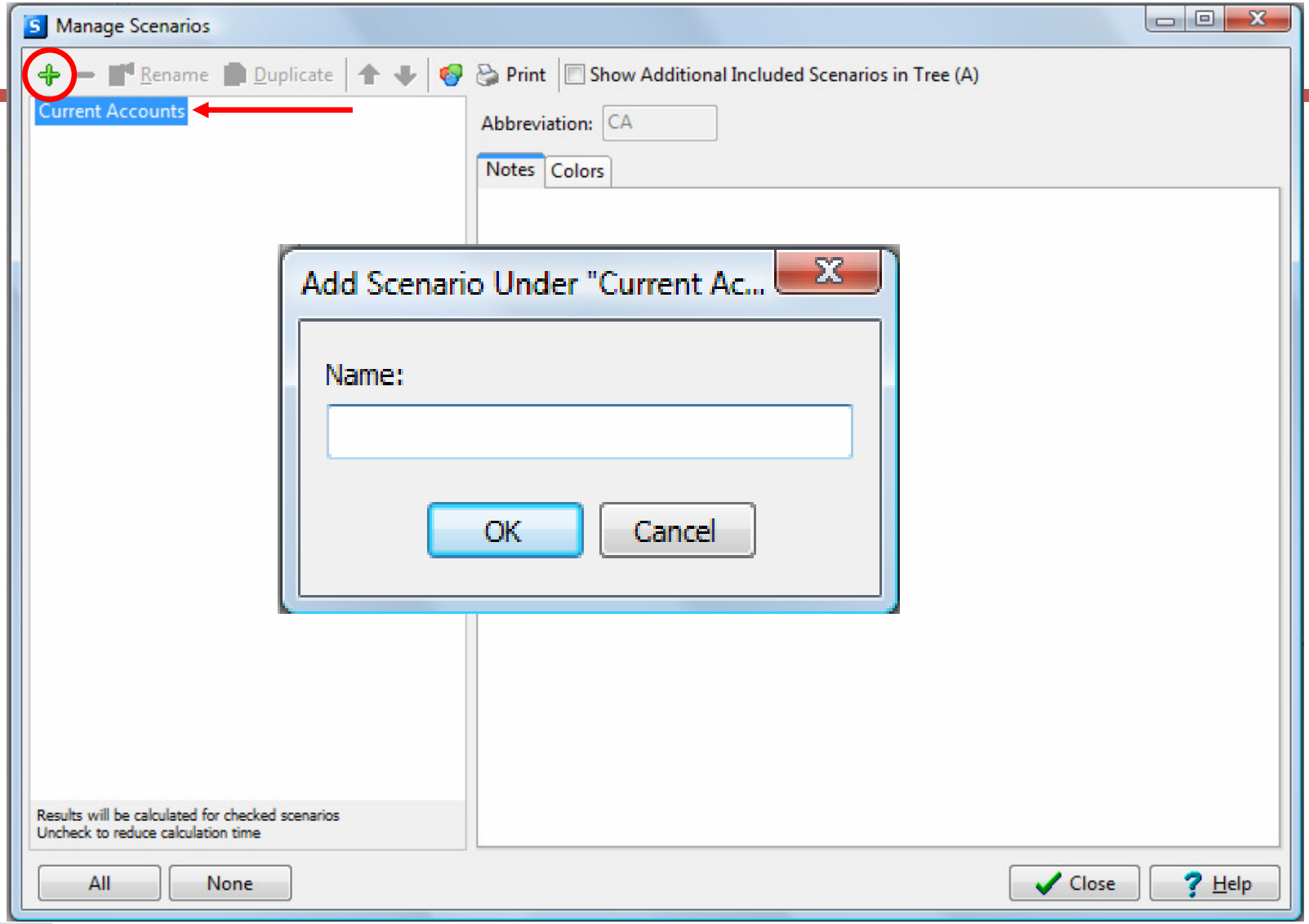
Add scenarios (2/2)



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Insert assumptions

- Use of Expressions: mathematical formulae used to specify how the values of a variable change from year to year
  - *In Current Accounts* an expression defines the historical values for a given variable at a branch
  - *In scenarios* an expression defines how a variable changes over time from the First Scenario Year to the End Year
- Inheritance
  - Combination of individual policy scenarios

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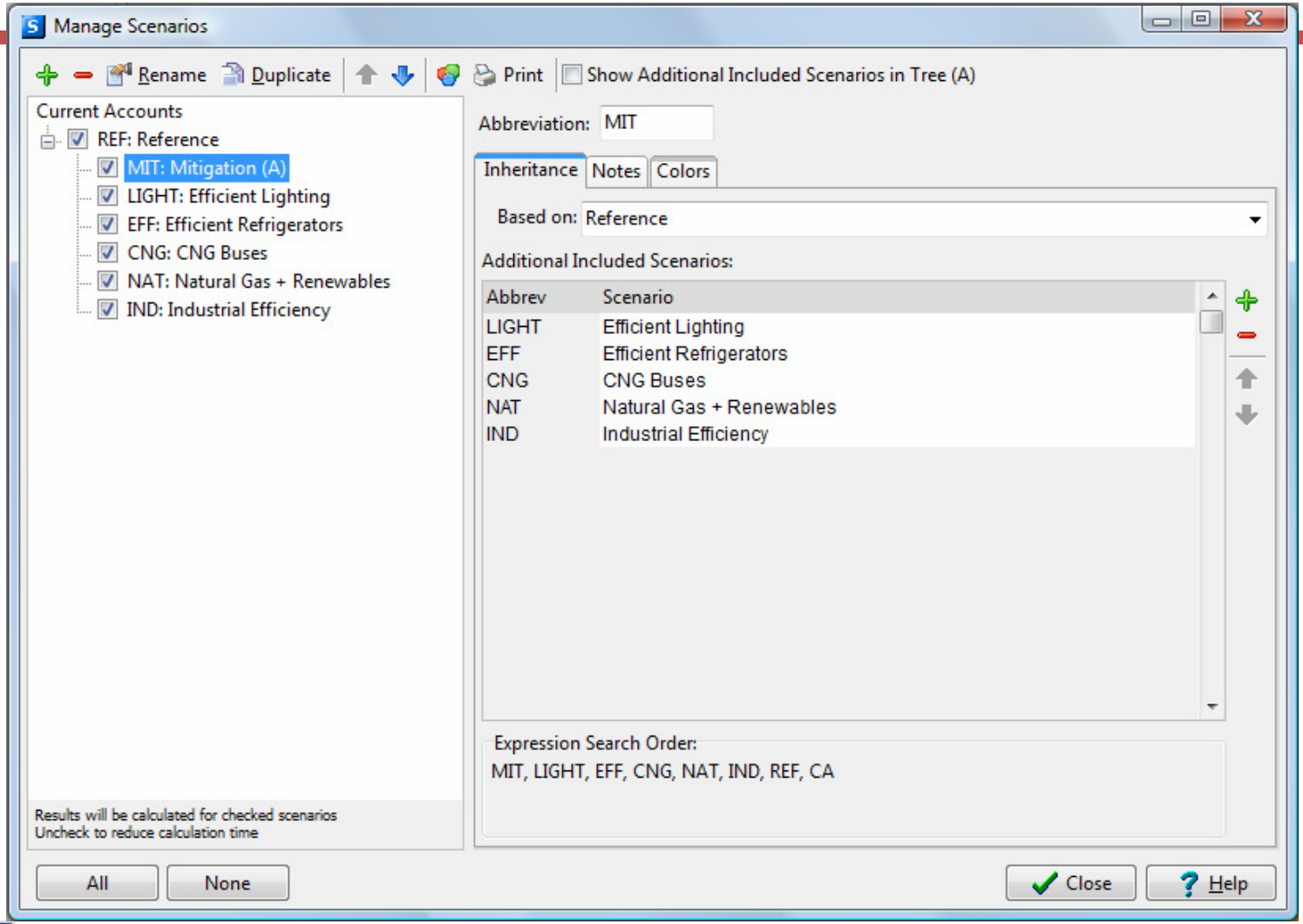
Example: scenario hierarchy with multiple inheritance



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Insert/edit expressions

- Type directly into the expression field in data entry table
- Use Expression Builder tool (Ctrl-B or): a general purpose tool for creating expressions
  - Branch/Variable Wizard ( ): a tool to select a specific variable at particular branch
  - Function Wizard (Ctrl-F or): a tool to add functions into your expressions and complete the required parameters for each function
  - Time-Series Wizard (Ctrl-T or): a tool for easily entering time-series functions (Interpolation, Step, Smooth and forecasting functions)

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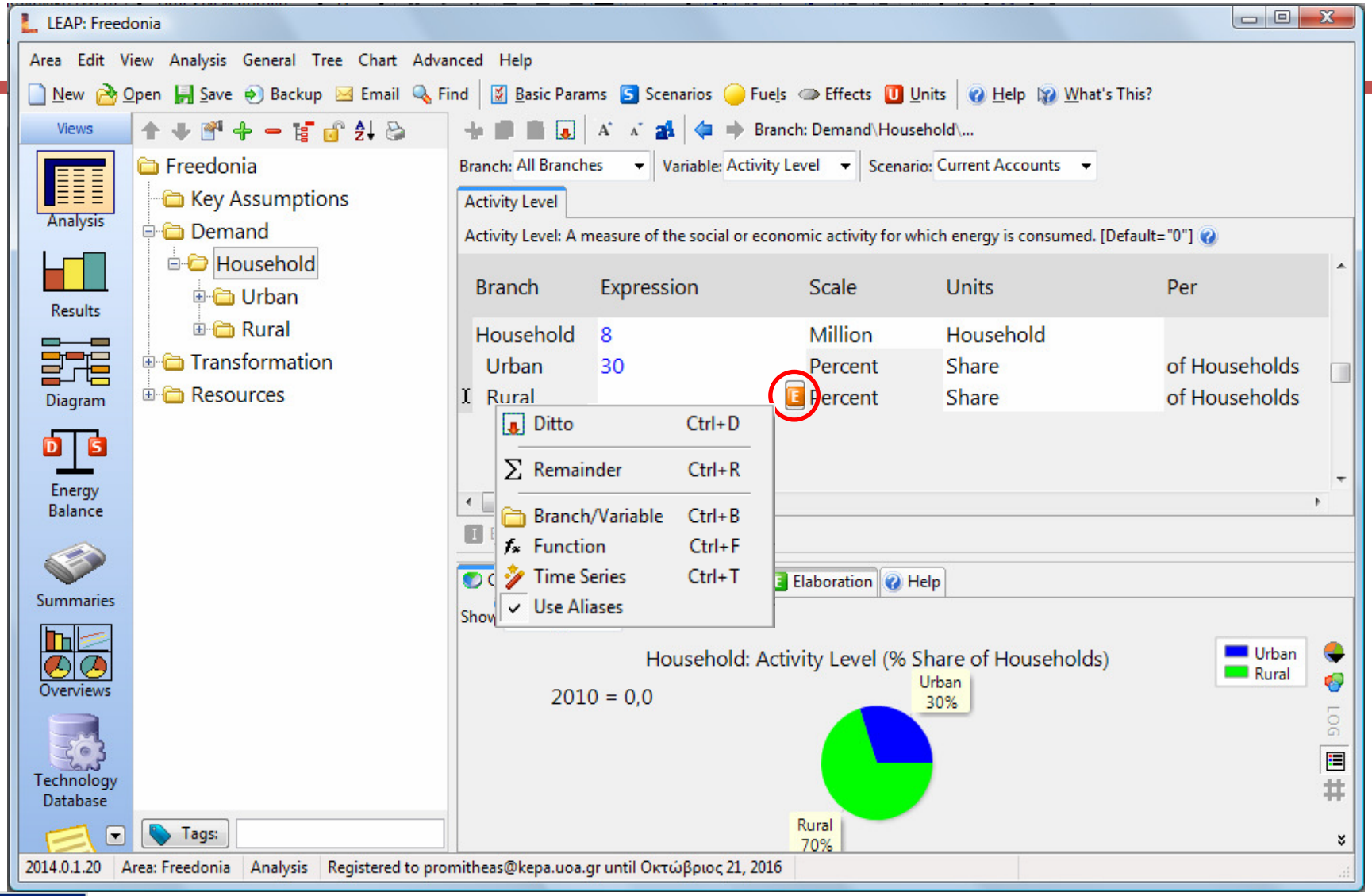
Expression Builder



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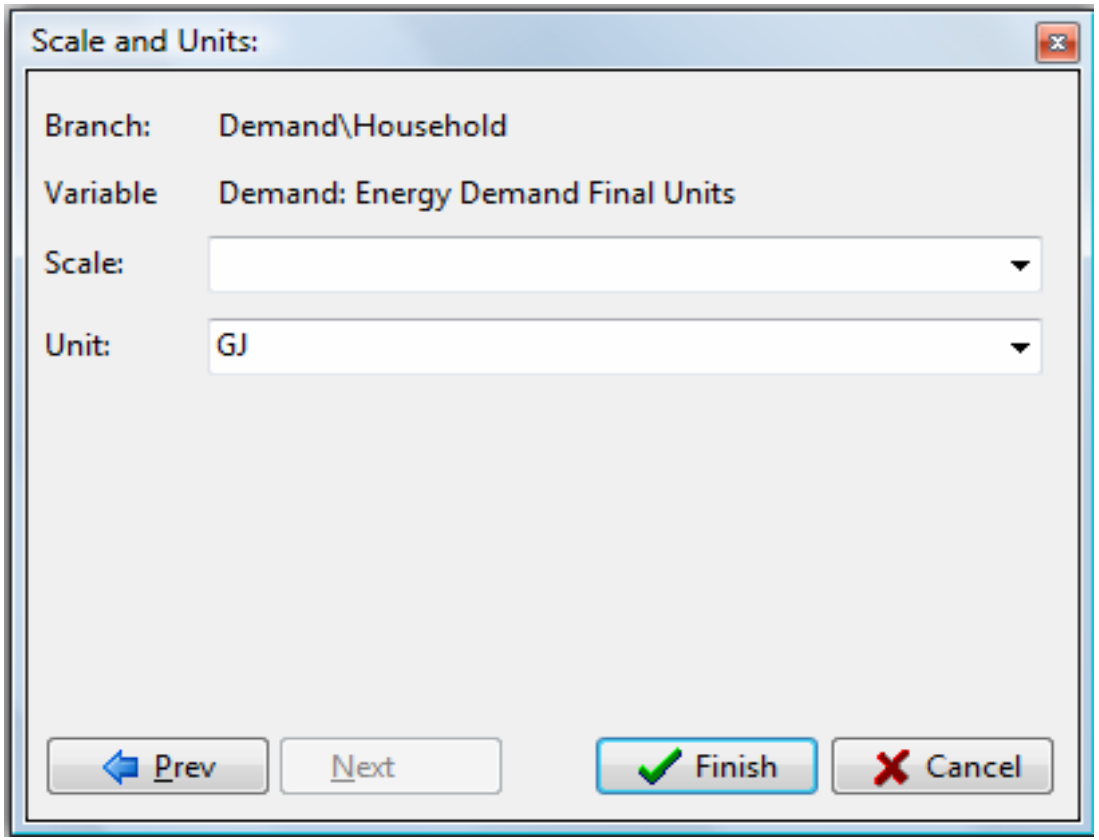
Branch/Variable Wizard

Pop-up window used to select a specific variable at particular branch



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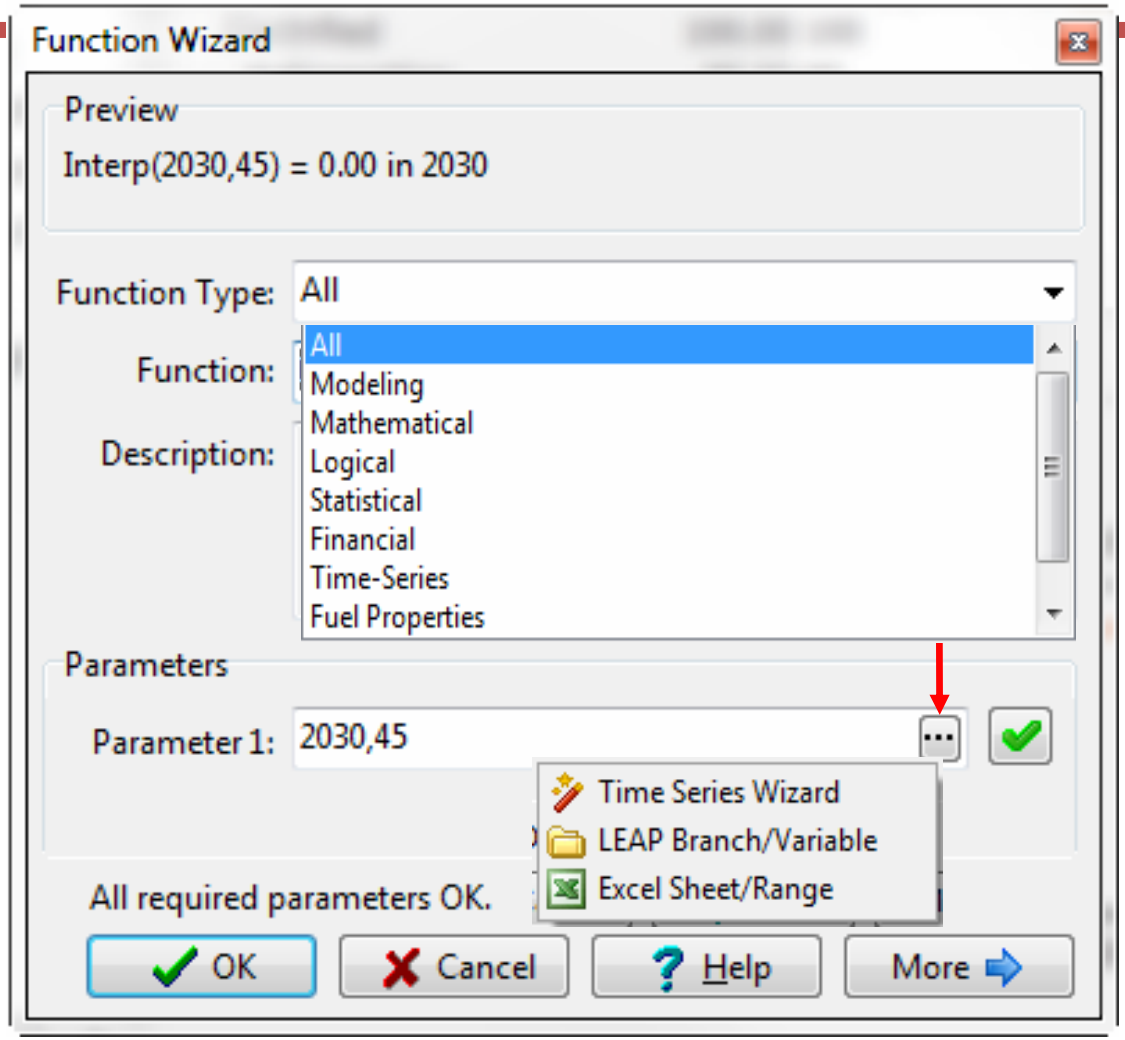
Function Wizard



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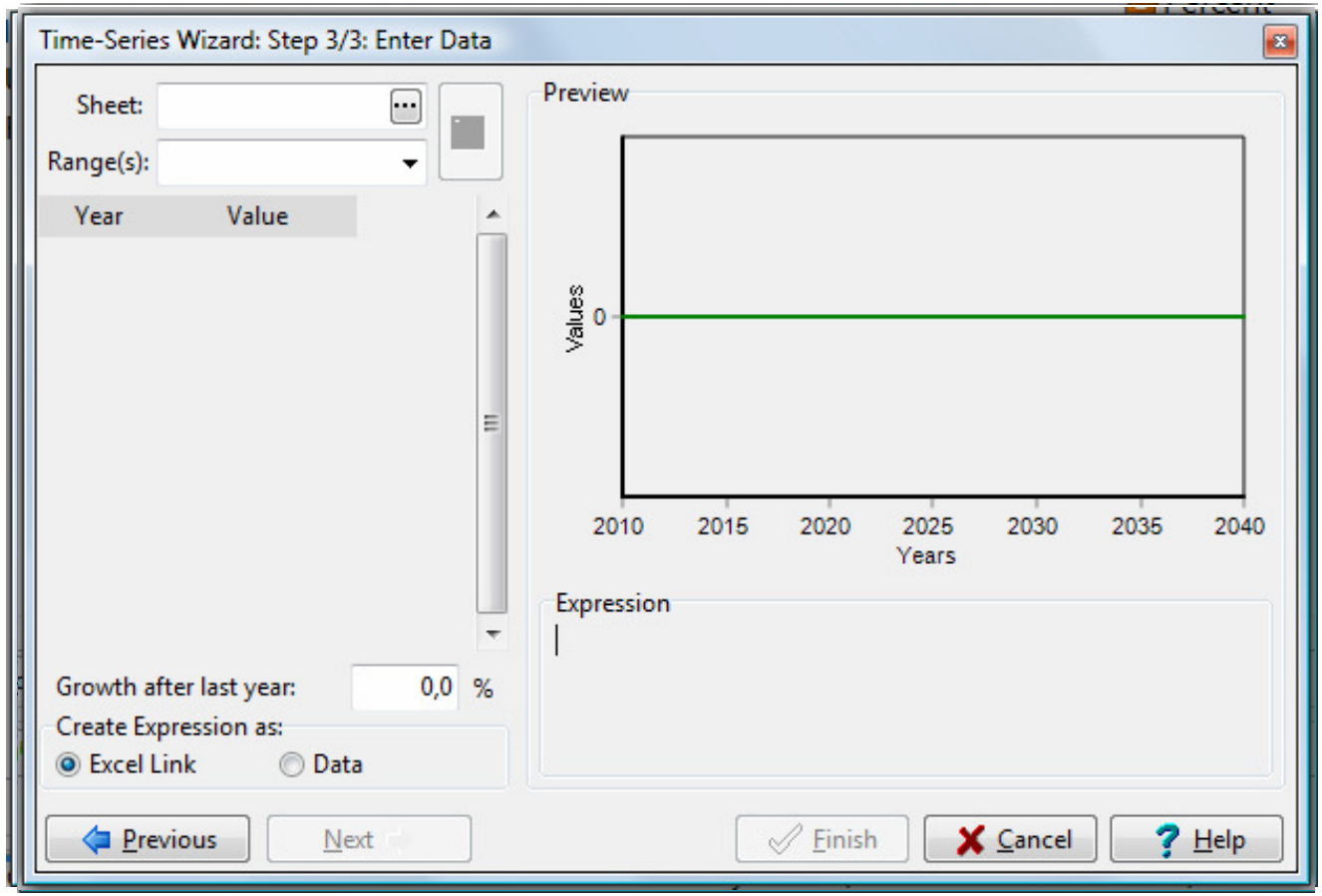
Time-series Wizard



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Show Results

Step 1: Press *Results View*

Step 2: Press Yes in *Confirm* pop-up window

Step 3: Go to *Result selection box* to pick category of results

Step 4: Go to *Tree* to pick branches for which you wish to see results

Step 5: Click on *Selection boxes* attached to the chart's *X Axis* and *Legend* to pick the dimensions you want to see in the chart or table.

Step 6: Choose *format* in chart, table or both

Step 7: Click on *More* button

Step 8: Export to *PowerPoint/Word/JPEG* and *Excel*

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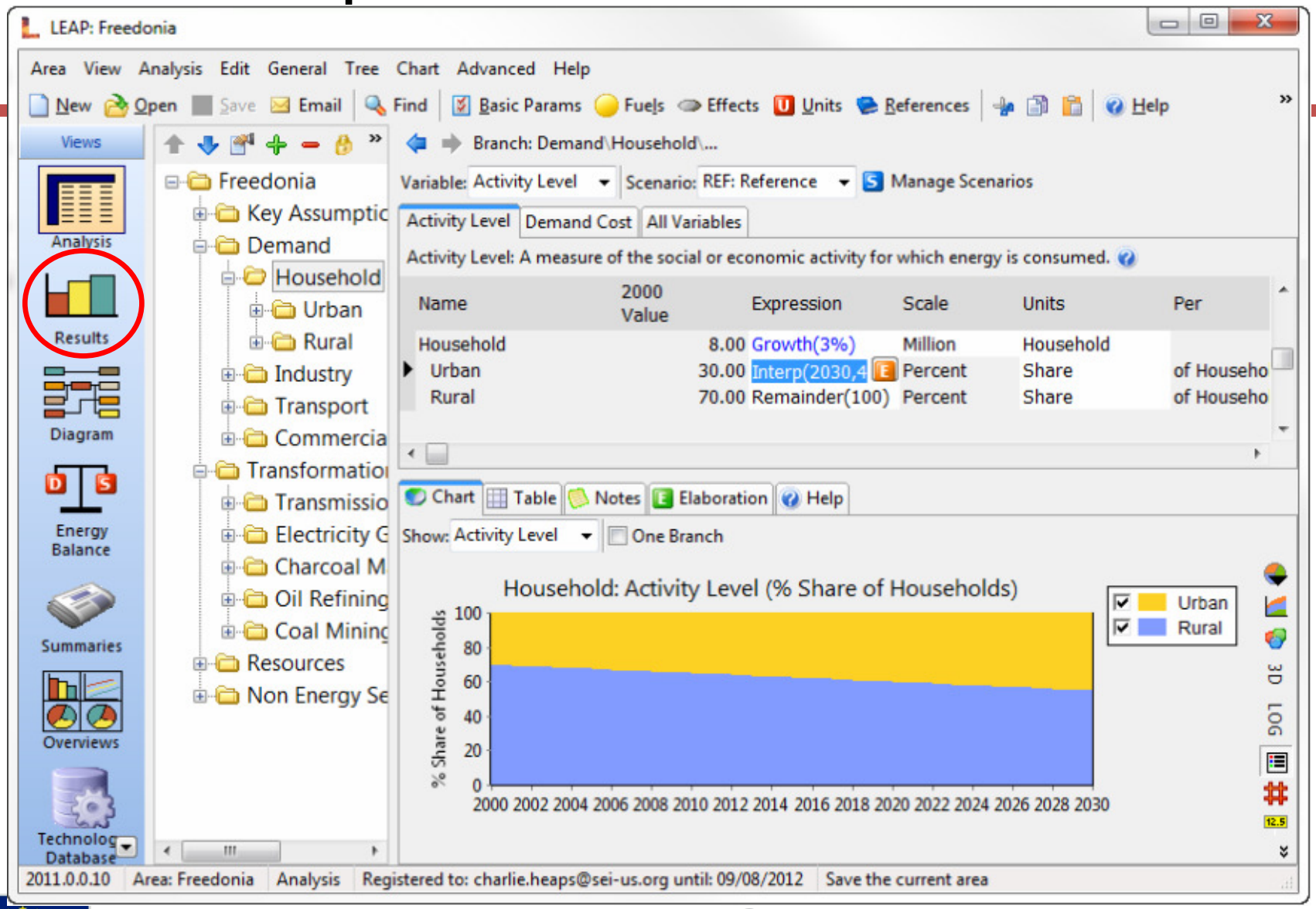
Step 1: Press Results View



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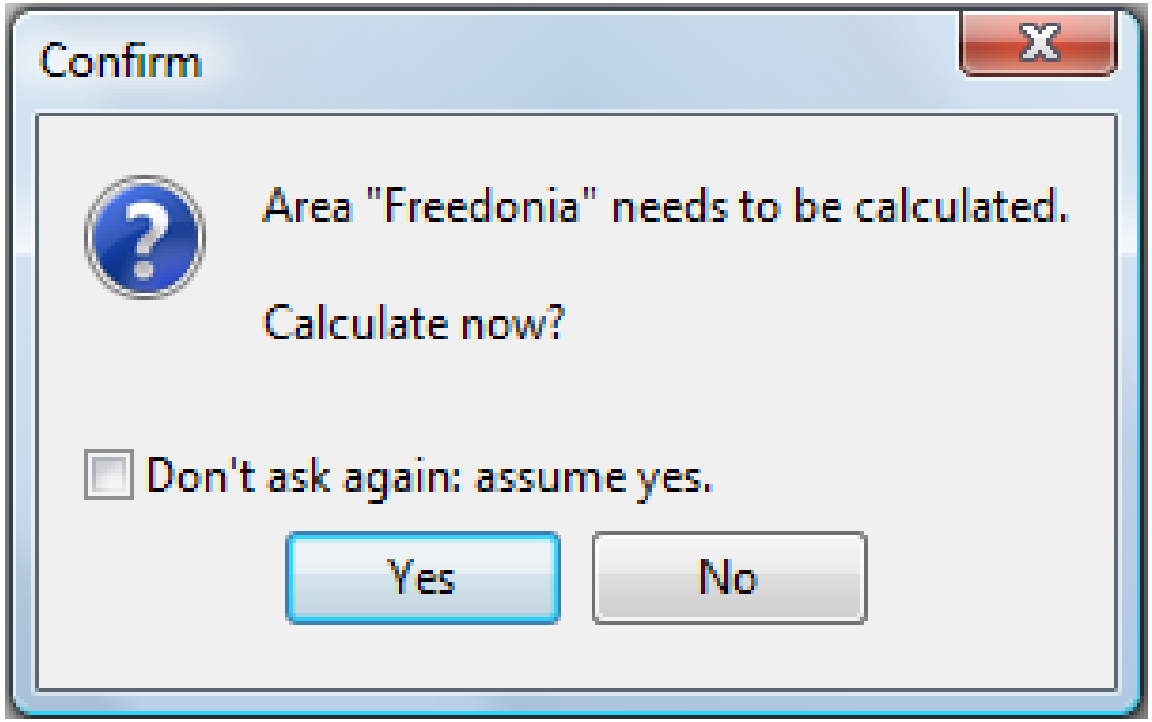
Step 2: Confirm



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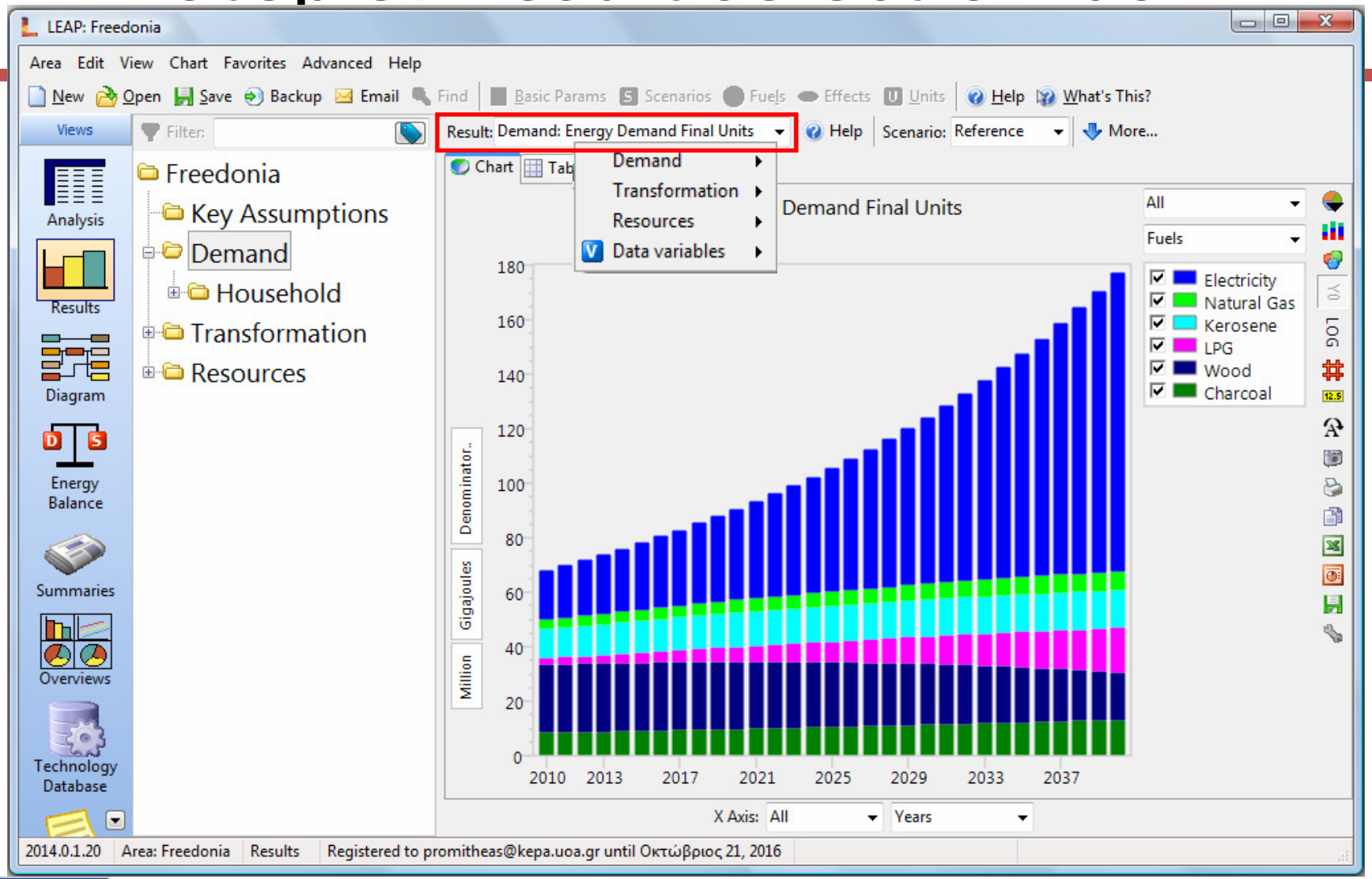
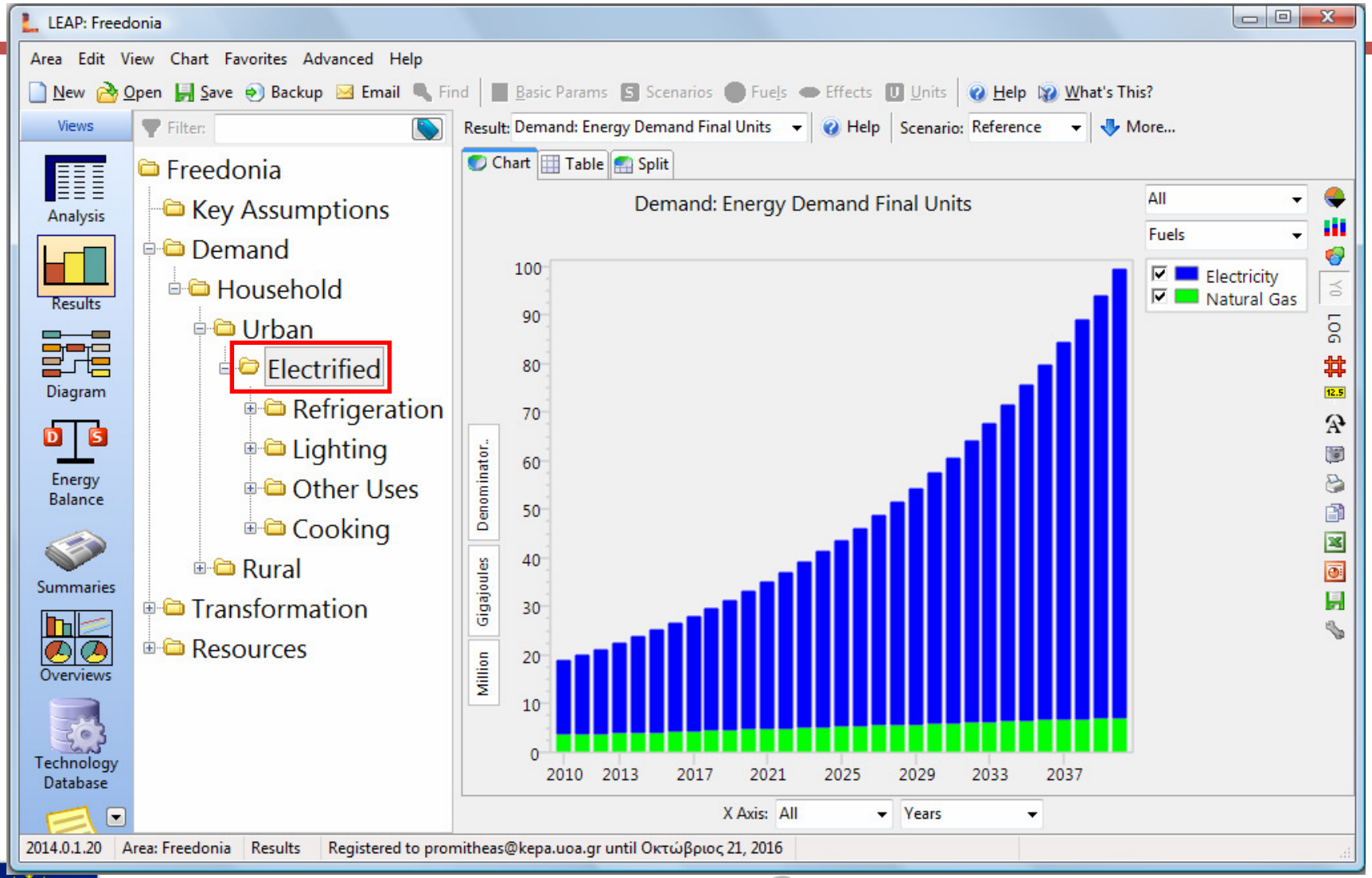
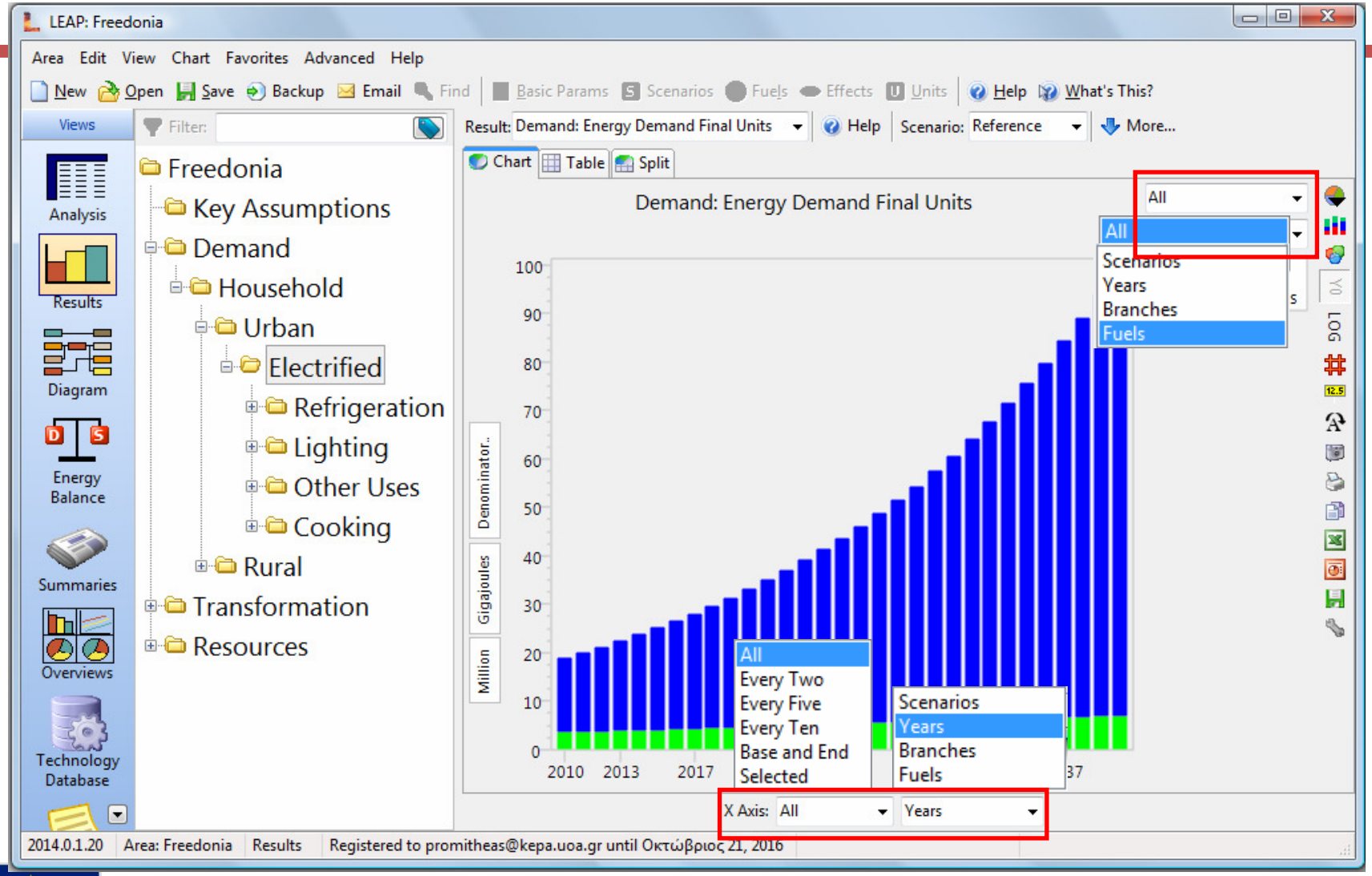
Step 3: Result selection box



Step 4: Pick Tree branch



Step 5: Selection boxes



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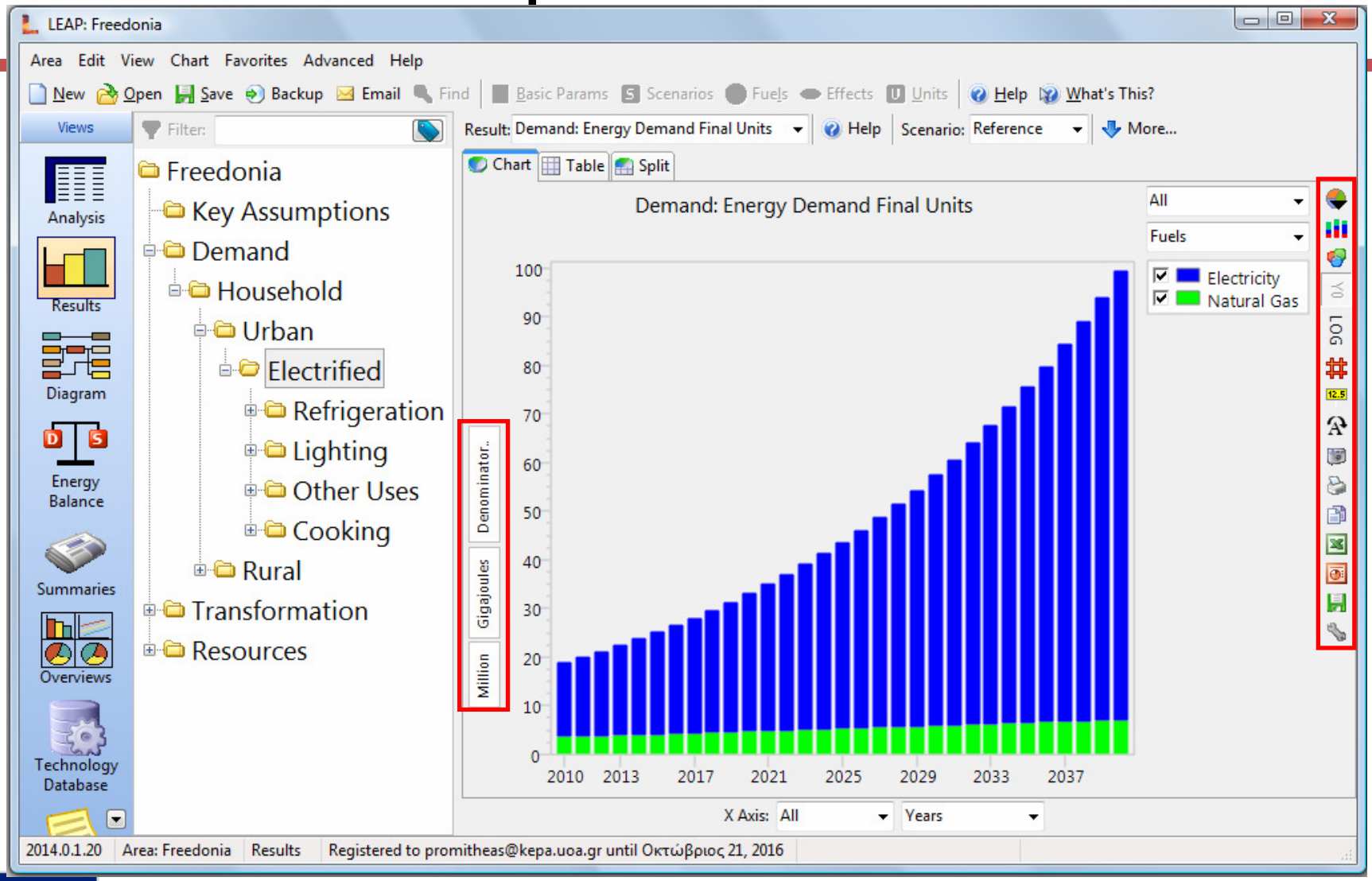
Step 6: Format



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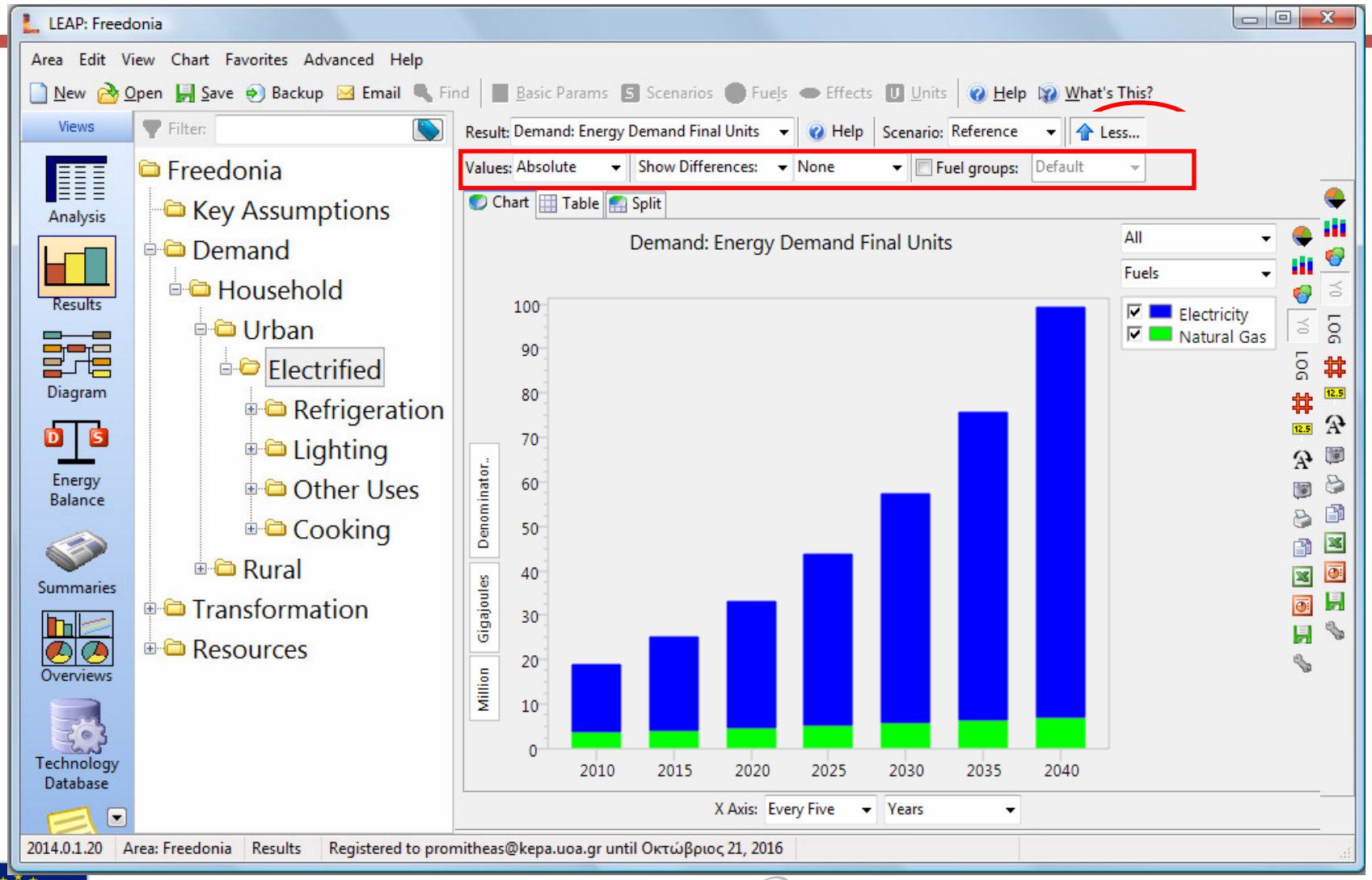
Step 7: “More” button



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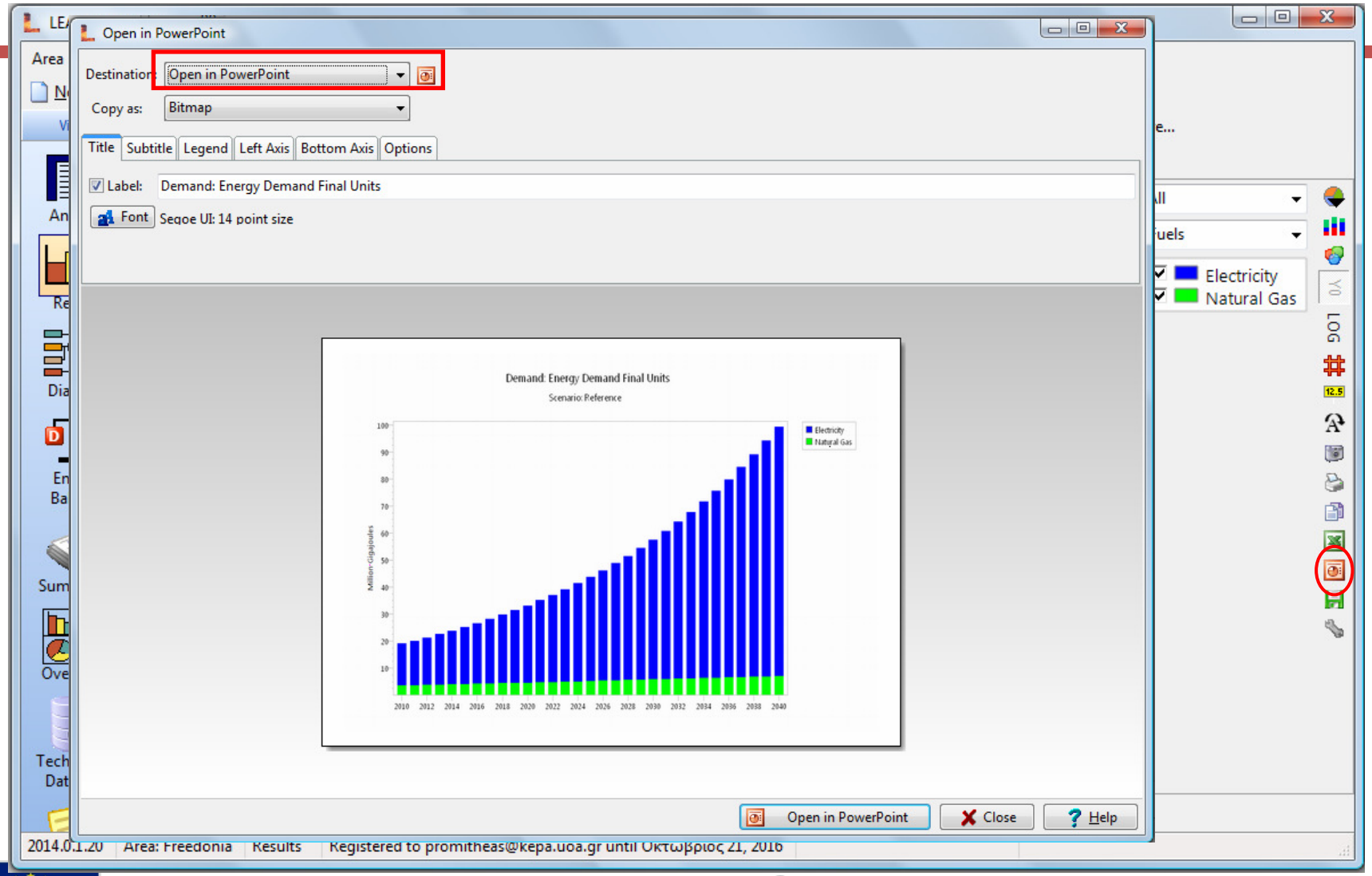
Step 8: Export Charts



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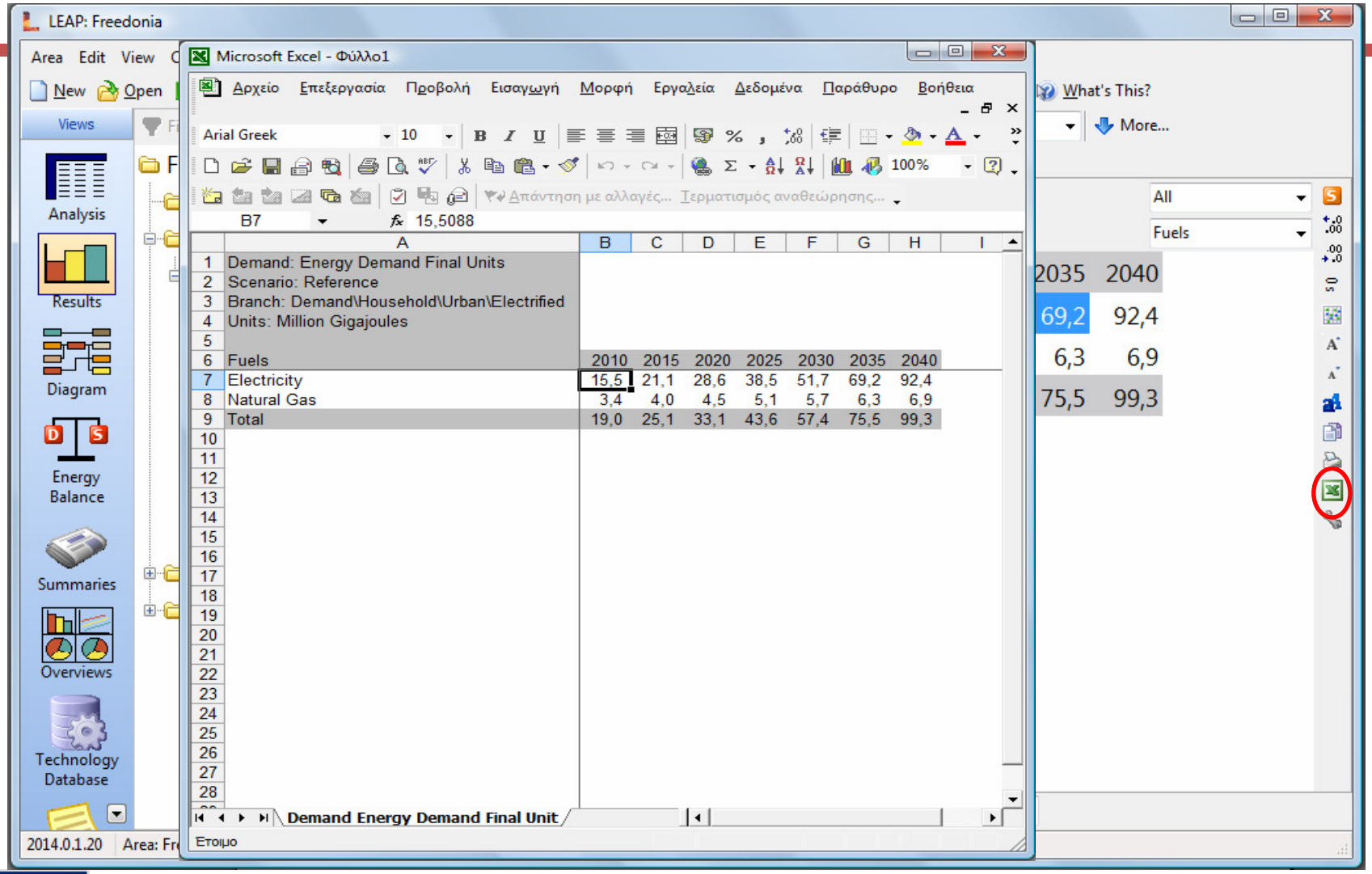
Step 8: Export Tables



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Let's practice!

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