



# Communities of Practice

## Excel Based Tool & Investors' Deck

3<sup>rd</sup> Session – 30/06/2023



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# Feedback, common doubts and received questions



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# How can the model help you?

The Excel Based Tool and the Investor's Deck help you to:

**Enhance the attractiveness of the projects and broaden access to potential investors**

**Summarize common elements of projects in way investors are familiar with**

**Simplify interdepartmental financial data sharing, making it accessible for end users**

**Conduct an analysis of the project's feasibility and identify potential sources of financing**

**Present, defend, and raise the necessary capital required to secure the funding for project execution**

# Single Project vs. Multiple projects

- IC with **1 single project**:
  - ✓ 1 Excel Based Tool
  - ✓ 1 Investors' Deck
- IC with **multiple projects**:
  - Option A:**
    - ✓ 1 Excel Based Tool per project
    - ✓ 1 Investors' Deck per project
  - Option B:**
    - ✓ 1 Excel Based Tool per project
    - ✓ 1 aggregated Investors' Deck

# Using ‘square meters’ in the Excel-Based tool

“Square meters” is a required input for the following sectors:

- ✓ **Non-residential buildings**
- ✓ **Residential buildings**
- ✓ **Public buildings**
- ✓ **Building integrated energy systems**
- ✓ **District heating and cooling**

Assumptions tab

	A	B
1	Country	Slovakia
2	Project type	H2020 EUCF
3	Project Sectors	Renewable energy production infrastructure
4	Squared metres (Only for Public, Non-residential & Residential buildings , Building integrated energy systems and District heating and cooling)	80000

# Difference between the discount rate and WACC

## Discount rate:

- ✓ Used to determine the present value of future cash flows in a discounted cash flow (DCF) analysis. Is set according to **customized factors** tailor made for specific projects.

## WACC:

- ✓ Represents the average cost of financing for a company with **private sources**. It considers the cost of both equity and debt capital components weighted for their share of capital structure.

## We use WACC because:

Is a **STANDARD KPI**

Permits an **OBJECTIVE VALUATION**

Is applicable to a **WIDE NUMBER OF PROJECTS**

Except those funded with **public sources** only

# Negative CAPEX? – It should not be considered (I/II)

In the Excel Based Tool, no projects can assume negative CAPEX, **either zero or positive**

**1<sup>st</sup> step**

**How to handle different savings?**

2 options, depending on what you do with them

**Are these savings producing revenue?**

E.g., the sale of surplus energy

**Enter them in the Assumptions - Revenues tab**

**Are these savings reducing your costs?**

E.g., the reduction of the cost of your energy

**Enter the final cost you estimated in the Assumptions - OPEX tab**

(negative, it remains a cost)



# Negative CAPEX? – It should not be considered (I/II)

The Excel Based Tool considers **energy savings in the Financial & ESG Metrics tab:**

**2<sup>nd</sup> step**

**How to handle different savings?**

2 options, depending on the types of savings

**Energy savings (fuel, electricity, etc.)**

**Financial & ESG Metrics tab:**

- It automatically calculates them – **Scenario 1**
- There is a **new feature** – **Scenario 2** ->  
You can introduce your own calculations  
**Explained in the next Chapter (first topic-ESG)**

**Other savings (salaries, goods supplies, etc.)**

**The END**

There are no further actions to take in the tool



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# Updated version of the Excel Based Tool



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# Before we start...

- 1. Not mandatory**
- 2. Old version is right**
- 3. It is a generic tool that has been customized based on your feedback to accommodate new scenarios/cases**



# New tab added – ESG Assumptions

✓ It allows you to:

- a) know which **values formed the basis for calculating the ESG Metrics;**
- b) **modify the values of those assumptions** for any reason you consider

ESG ASSUMPTIONS		
Metrics	Data used for ESG Metrics calculation	Default Assumptions (If the values are not known, fill the left column with the default assumptions)
kgCO2/kWh (electricity) (by country)	0.102	0.102
Energy price (€/kWh) (by country)	0.124 €	0.124 €
Fuel price (gasoline) (€/l) (by country)	1.581 €	1.581 €
Solar kit (7kW)	12,000 €	12,000 €
Solar hours (lifetime project)	59200	59,200
Estimated Cost of reducing CO2 emissions (Euros per ton)	225 €	225 €
Jobs created per million invested	18	18

# Update of Financial & ESG Metrics tab – ESG Metrics

ESG Metrics		
	SCENARIO 1. Figures provided by the tool	SCENARIO 2. Figures come from outside the tool
CO2 avoided (tonnes)	216,170	
Energy Savings (kWh)	2,123,512,167	
Energy produced (kWh)	2,123,512,167	
Energy Savings (€)	263,740,211 €	
Job creation (number of jobs)	1,017	
Investment value (€)	56,476,387 €	

- ✓ Column **Scenario 1**. The column remains unchanged since the last version:
  - a) **Automatically generated from ESG Assump. tab;**
  - b) remember that, although it is automatically calculated, in the previous slide we have shown that you can now change the base values

- ✓ **New column added, Scenario 2:**
  - a) Not mandatory;
  - b) Fill it in **manually** only **in case you calculated ESG Metrics other than using this tool;**
  - c) for the purpose of facilitating comparisons between different scenarios.

## Equity IRR:

- ✓ Automatically calculated in the Excel Based Tool
- ✓ Internal rate of return for investors (equity)
- ✓ **Now** is not applicable when a project is not funded by private equity investors

New feature

New feature

## IRR of the project:

- ✓ Automatically calculated in the Excel Based Tool
- ✓ Internal rate of return of the project
- ✓ Applicable for all types of projects.
- ✓ To evaluate projects with or without equity investments

## Incorporation of Project IRR

Automatically  
generated



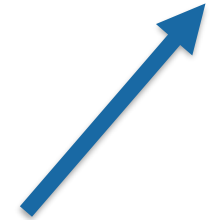
Financial Metrics	
Equity Internal Rate of Return (IRR)	16.15%
Project Internal Rate of Return (IRR)	10.53%
PayBack Period (Years)	12
Net Present Value (NPV)	63,191,361 €



# Update of Assumptions tab – Project duration

Cell B9 – Extension from 29 years to 50 years

8	Project Termination Year (Must be $\leq$ 2074)	2074
9	Project Lifetime (yrs)	50



Manual data entry

# Update of Assumptions tab – Cost of the debt

The new version of the Excel Based Tool **shows the cost of the debt and allows you to modify it:**

✓ The debt interest rate is **now considered an assumption, located in the Assumptions Tab - Cell B33:**

33	Cost of Debt (Interest Rate %)	7.87%
34	Opening fee	0.50%

1. The interest rate on the debt continues to be calculated automatically. **If you are not aware of the cost of debt, please keep it as it is.**
2. Nevertheless, even if the calculation is automated, **you have the flexibility to adjust it** if you know the interest rate representing the cost of your debt.

Created for those municipalities that know exactly its value.

# Update of Assumptions tab – Project Funding Structure

## Old version

### EXAMPLE

Required Capex		<b>100</b>
<i>Funded with public sources</i>		
- of which Subsidies	40	
- of which Public funding	20	<b>60</b>
<i>Funded with private sources</i>		
- of which Equity	0	
- of which Debt	40	<b>40</b>

# Update of Assumptions tab – Project Funding Structure

**New version**

PROJECT FUNDING STRUCTURE				
	Percentage		Amounts (€)	
Required Capex	100		56,476,387 €	
<i>Funded with public sources</i>				
- of which Subsidies	40		22,590,555 €	
- of which Public funding	20	60	11,295,277 €	33,885,832 €
<i>Funded with private sources</i>				
- of which Equity	0		0 €	
- of which Debt	40	40	22,590,555 €	22,590,555 €
<b>Initial Cash (€) required</b>	<b>2,823,819 €</b>			



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# Practical Exercises



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# Before we start...

## Assumptions tab:

22	HYP. Subsidies	40.00%
24	HYP. Public Funding	20.00%
25		
28	HYP. Equity	30.00%
30	HYP. Debt	70%

HYP. Subsidies and HYP Public Funding cells represent the same values of the Public Sources in the Project Funding Structure.  $40\% + 20\% = 60\%$

PROJECT FUNDING STRUCTURE			
	Percentage	Amounts (€)	
Required Capex	100	56,476,387 €	
<i>Funded with public sources</i>			
- of which Subsidies	40	22,590,555 €	
- of which Public funding	20	60	33,885,832 €
<i>Funded with private sources</i>			
- of which Equity	12	6,777,166 €	
- of which Debt	28	40	22,590,555 €

HYP. Equity and HYP Debt cells represent the percentage of the remaining percentage not funded with public sources.

In this example, they represent 30% and 70% of the remaining 40%. It means:  
**12%** =  $30\% \times 40\%$  and  
**28%** =  $70\% \times 40\%$  of the Private Sources in the Project Funding Structure

Initial Cash (€) required 2,823,819 €

The updated version does not change the way it is used. **Users will still only need to fill in the HYP values**

# Business case 1a – 100% of Public sources (mix Subsidies and Public funding)

## Assumptions tab:

22	HYP. Subsidies	80.00%
24	HYP. Public Funding	20.00%
25		
28	HYP. Equity	0.00%
30	HYP. Debt	100%

The sum must be = 100%  
**HYP. Equity always 0%**  
**HYP. Debt always = 100%**  
 In the example, it means 100% of the remaining 0%

PROJECT FUNDING STRUCTURE				
	Percentage		Amounts (€)	
Required Capex	100			56,476,387 €
<i>Funded with public sources</i>				
- of which Subsidies	80		45,181,110 €	
- of which Public funding	20	100	11,295,277 €	56,476,387 €
<i>Funded with private sources</i>				
- of which Equity	0		0 €	
- of which Debt	0	0	0 €	0 €

Initial Cash (€) required 2,823,819 €



# Business case 1a – 100% of Public sources (mix Subsidies and Public funding)

## Financial & ESG Metrics tab:

### Financial Metrics

Equity Internal Rate of Return (IRR)	Not meaningful for projects that are funded without equity
Project Internal Rate of Return (IRR)	12.42%
PayBack Period (Years)	0
Net Present Value (NPV)	Not meaningful for projects that are funded by 100% of public sources

Not meaningful

## Valuation tab:

1	FREE CASH FLOW	WACC	Not meaningful
2		RV Growth (%)	0.1%

# Business case 1b – 100% of Public sources (100% Public funding)

## Assumptions tab:

22	HYP. Subsidies	0.00%
24	HYP. Public Funding	100.00%
25		
28	HYP. Equity	0.00%
30	HYP. Debt	100%

→ HYP. Pub. Funding = 100%

→ **HYP. Equity always 0%**

**HYP. Debt always = 100%**

In the example, it means 100% of the remaining 0%

PROJECT FUNDING STRUCTURE				
	Percentage		Amounts (€)	
Required Capex		100		56,476,387 €
<i>Funded with public sources</i>				
- of which Subsidies		0		0 €
- of which Public funding		100	100	56,476,387 €
<i>Funded with private sources</i>				
- of which Equity		0		0 €
- of which Debt		0	0	0 €

Initial Cash (€) required 2,823,819 €

# Business case 1b – 100% of Public sources (100% Public funding)

## Financial & ESG Metrics tab:

### Financial Metrics

Equity Internal Rate of Return (IRR)	Not meaningful for projects that are funded without equity
Project Internal Rate of Return (IRR)	12.42%
PayBack Period (Years)	0
Net Present Value (NPV)	Not meaningful for projects that are funded by 100% of public sources

Not meaningful

## Valuation tab:

1	FREE CASH FLOW	WACC	Not meaningful
2		RV Growth (%)	0.1%

# Business case 2 – % of Public funding sources + % of Equity

## Assumptions tab:

22	HYP. Subsidies	40.00%
24	HYP. Public Funding	20.00%
25		
28	HYP. Equity	100.00%
30	HYP. Debt	0%

The sum must be < 100%

**HYP. Equity always = 100%**  
In the example, it means 100% of the remaining 40%

**HYP. Debt always = 0%**

PROJECT FUNDING STRUCTURE			
	Percentage		Amounts (€)
Required Capex	100		56,476,387 €
<i>Funded with public sources</i>			
- of which Subsidies	40		22,590,555 €
- of which Public funding	20	<b>60</b>	11,295,277 €
<i>Funded with private sources</i>			
- of which Equity	40		22,590,555 €
- of which Debt	0	<b>40</b>	0 €
			22,590,555 €

Initial Cash (€) required      2,823,819 €

# Business case 2 – % of Public funding sources + % of Equity

## Financial & ESG Metrics tab:

### Financial Metrics

Equity Internal Rate of Return (IRR)	20.27%
Project Internal Rate of Return (IRR)	12.54%
PayBack Period (Years)	9
Net Present Value (NPV)	38,029,925 €

All outputs are meaningful

## Valuation tab:

1	FREE CASH FLOW	WACC	10.00%
2		RV Growth (%)	0.1%

# Business case 3 – % of Public funding sources + % of Debt

## Assumptions tab:

22	HYP. Subsidies	40.00%
24	HYP. Public Funding	20.00%
25		
28	HYP. Equity	0.00%
30	HYP. Debt	100%

The sum must be < 100%

**HYP. Equity always 0%**

**HYP. Debt always = 100%**

In the example, it means 100% of the remaining 40%

PROJECT FUNDING STRUCTURE				
	Percentage		Amounts (€)	
Required Capex		100		56,476,387 €
<i>Funded with public sources</i>				
- of which Subsidies	40			22,590,555 €
- of which Public funding	20	60		11,295,277 €
				33,885,832 €
<i>Funded with private sources</i>				
- of which Equity	0			0 €
- of which Debt	40	40		22,590,555 €
				22,590,555 €

Initial Cash (€) required 2,823,819 €

# Business case 3 – % of Public funding sources + % of Debt

## Financial & ESG Metrics tab:

### Financial Metrics

Equity Internal Rate of Return (IRR)	Not meaningful for projects that are funded without equity
Project Internal Rate of Return (IRR)	13.03%
PayBack Period (Years)	0
Net Present Value (NPV)	111,403,855 €

Not meaningful

## Valuation tab:

1	FREE CASH FLOW	WACC	6.27%
2		RV Growth (%)	0.1%

# Business case 4 – % of Public funding sources + % of Equity + % of Debt

## Assumptions tab:

22	HYP. Subsidies	40.00%
24	HYP. Public Funding	20.00%
25		
28	HYP. Equity	30.00%
30	HYP. Debt	70%

The sum ->  $0\% < X < 100\%$

**HYP. Equity  $0\% < X < 100\%$**

**HYP. Debt  $0\% < X < 100\%$**

In the example, each one means the percentage of the remaining 40%

PROJECT FUNDING STRUCTURE				
	Percentage		Amounts (€)	
Required Capex	100			56,476,387 €
<i>Funded with public sources</i>				
- of which Subsidies	40			22,590,555 €
- of which Public funding	20	60		11,295,277 €
				33,885,832 €
<i>Funded with private sources</i>				
- of which Equity	12			6,777,166 €
- of which Debt	28	40		15,813,388 €
				22,590,555 €

Initial Cash (€) required 2,823,819 €



# Business case 4 – % of Public funding sources + % of Equity + % of Debt

## Financial & ESG Metrics tab:

### Financial Metrics

Equity Internal Rate of Return (IRR)	36.88%
Project Internal Rate of Return (IRR)	12.88%
PayBack Period (Years)	6
Net Present Value (NPV)	78,081,689 €

All outputs are meaningful

## Valuation tab:

1	FREE CASH FLOW	WACC	7.39%
2		RV Growth (%)	0.1%



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# Update of the Investors' Deck & Potential funding scenarios



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# Investors' Deck – NPV, IRR and Payback Period



- **Net Present Value:** delete it when your project is funded by 100% of Public Sources
- **Equity IRR:** delete it when you are not planning any private equity investors
- **Project IRR:** always, **add a new line**
- **Payback Period:** delete it when you are not planning any equity investors



## TEMPLATE (Outputs)

	DESCRIPTION	UNITS
<b>FINANCIAL METRICS</b>		
1.	NET PRESENT VALUE (NPV)	€
2.	INTERNAL RATE OF RETURN (IRR) - EQUITY	%
3.	PROJECT INTERNAL RATE OF RETURN (IRR)	%
4.	PAYBACK PERIOD	YRS.
<b>ESG METRICS</b>		
4.	CO <sub>2</sub> AVOIDED	tonnes
5.	ENERGY SAVINGS	kWh
6.	ENERGY PRODUCED	kWh
7.	ENERGY SAVINGS	€
8.	JOB CREATION	number

# Investors' Deck – ESG Metrics

- If you have additionally calculated other ESG metrics apart from those provided by the Excel Based Tool, please **add a second column to differentiate the two scenarios**



## TEMPLATE (Outputs)

	DESCRIPTION	UNITS		
<b>FINANCIAL METRICS</b>				
1.	NET PRESENT VALUE (NPV)	XXX		€
2.	INTERNAL RATE OF RETURN (IRR) - EQUITY	XXX		%
3.	PROJECT INTERNAL RATE OF RETURN (IRR)	XXX		%
4.	PAYBACK PERIOD	XXX		yrs
<b>ESG METRICS</b>				
		SCENARIO 1	UNITS	SCENARIO 2
4.	CO <sub>2</sub> AVOIDED	XXX	tonnes	XXX
5.	ENERGY SAVINGS	XXX	kWh	XXX
6.	ENERGY PRODUCED	XXX	kWh	XXX
7.	ENERGY SAVINGS	XXX	€	XXX
8.	JOB CREATION	XXX	number	XXX

# When is a municipality eligible for...

## Only Public Sources (Business cases 1a and 1b)

### Projects presenting:

- **High-risk profile, and/or**
- **Low expected revenues, and/or**
- **Random volatility, and or**
- **Other features that make it not appealing for private investors**

- Project is subject to **changing law risk** that may endanger its viability
- Project **risks are not adequately offset by project returns** and/or adequate mitigants (i.e., tax relief on project revenues or contributions to investors)
- Project **cash flows are structurally not enough or volatile**

# When is a municipality eligible for... Public Sources & Equity (Business case 2)

## Projects presenting:

- **Lack of stable cashflows, and/or**
- **High-risk profile and expected revenues in line with private equity investors' eligible criteria**

**But projects present high-risk/high-return features**

- Project **cash flows are unstable** or materialize only after a **long completion period** not compliant with standard banks' best practices of interest-only loans
- When projects (or municipality) **cannot have access to subsidized debt funding**
- High revenues but volatile/unstable or generated in the long term, making the project **attracting patient capital** provided by equity investors

# When is a municipality eligible for...

## Public Sources & Debt (Business case 3)

### Projects presenting:

- **Enough cash flows to ensure debt service repayment**

**But not so high to remunerate equity investors**

- Here the **Public Sources** provides the project with **capital stability** typical of equity investors but **without requiring a high remuneration** in exchange which is usually targeted by equity investors



# When is a municipality eligible for...

## Public Sources & Debt & Equity (Business case 4)

### Projects presenting:

- **A risk profile and expected revenues in line with Private Sources eligible criteria**

**But not so high to remunerate equity investors**

- Project **cash flows are enough** to ensure **debt service** repayment and adequate **remuneration** to equity investors
- Project payback period is compliant with lenders/investors' preferences
- Project presents **refinancing capacity** in case of needs to replace either lenders or equity investors
- Capital allocation among the different funding sources TBD case by case



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# Thank you!

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