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EU Approach and Experience in Evaluation (CBA) and Ensuring Sustainability of EU Financed WWS Services

David Tagg : Senior Economist

Basis of Defining Approach to Ensure Financial Sustainability

- **What is financial sustainability :**

- Meet all operating costs including adequate maintenance provisions
- Meet costs of new and replacement assets as these fall due;
- Sustainability relies on consumers being able and willing to pay for services.

- **Legislative Background**

- Article 9 (1) of the Water Framework Directive;
- National regulatory structures / bodies

- **Approach and Needs**

- Assessment at Service Provider and Project (Incremental) Levels;
- Cash Flow Analysis over a Pre-Defined Reference Period

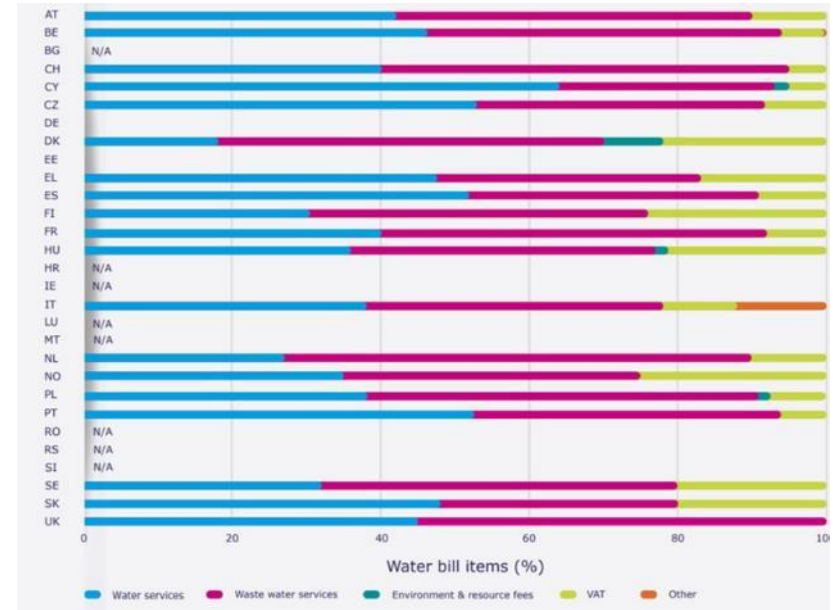
The Existing Position

- **Operating on a Breakeven Basis**
- **Wide range of tariff levels:**
 - **Service levels** – wastewater treatment and access;
 - **Cost structure** – low maintenance provisions leading to backlogs and higher replacement needs;
 - **Depreciation provisions** – asset valuation;
 - **Regulatory regimes** – cost and efficiency management / restrictive politically motivated practices

Domestic Tariff Levels – Euro / m³



Tariff Composition

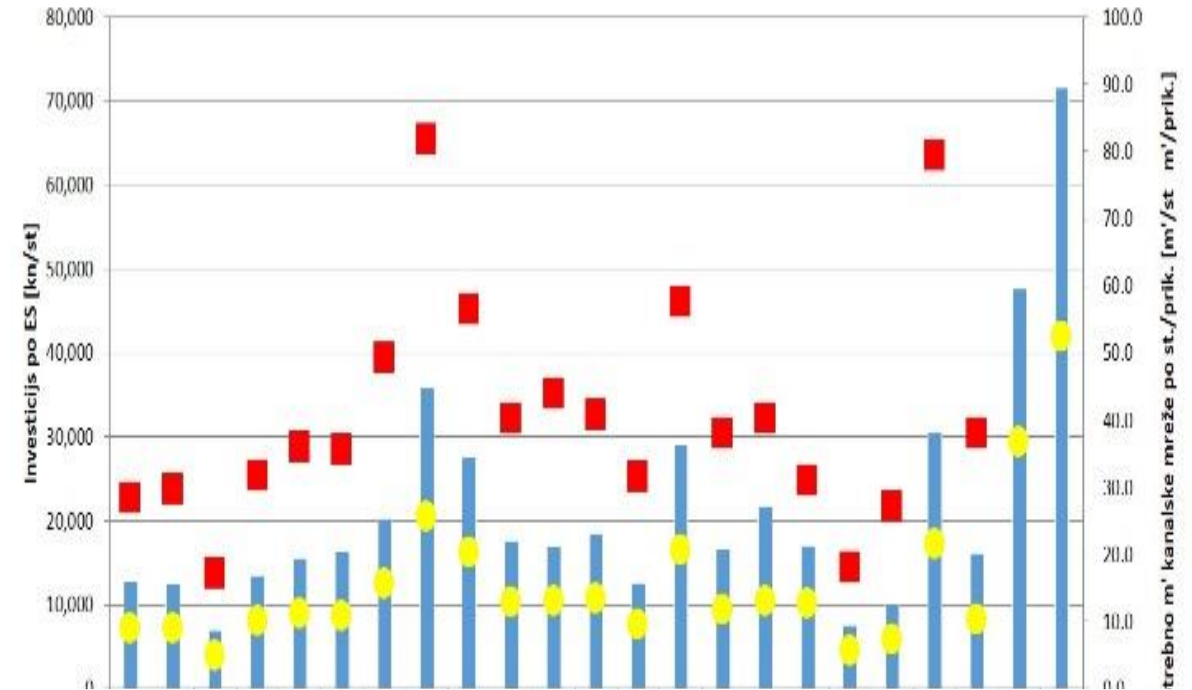


Source : EurEau

Future Needs : Project Optimisation

- **Water Supply**
 - New Connections
 - Compliance Standards;
 - Leakage Control / Asset Replacement
 - Sustainable Water Resource management
- **Wastewater Collection**
 - Sewer extensions – comprehensive coverage / agglomeration definition;
 - Optimisation (gravity / pressurized)
- **Wastewater Treatment**
 - Compliance determined by UWWTD – number and capacity of plants;
 - Sludge Treatment and End Disposal

Cost Efficiency of Service Provision

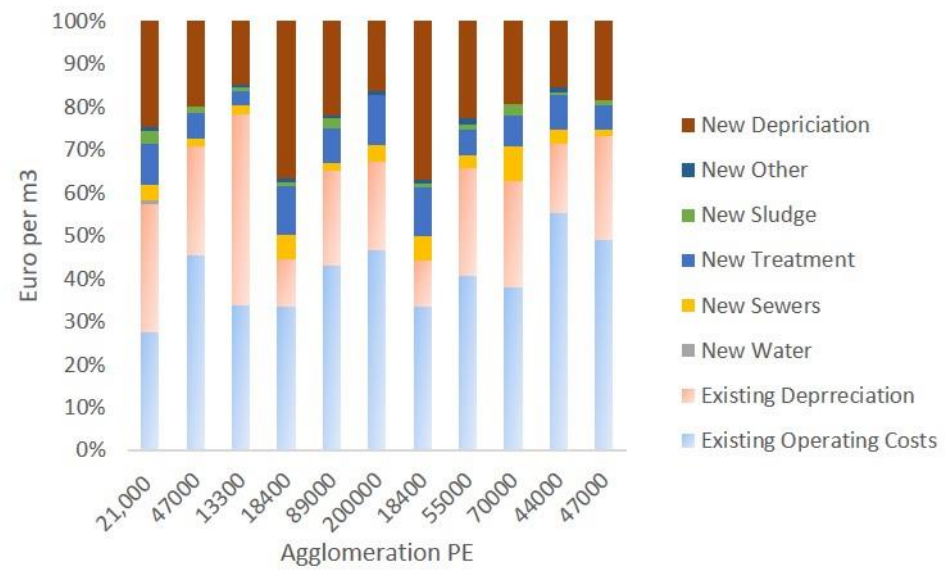
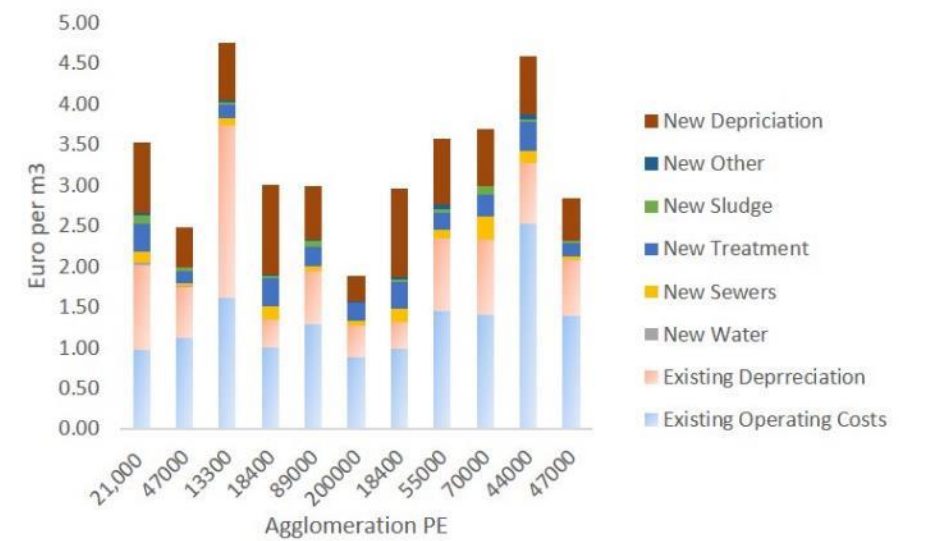


Future Needs : Cost Implications

- **Existing Costs**
 - Low maintenance provisions
 - Overstaffing

- **Tendency to Understate Future Costs;**
 - Maintenance provisions;
 - Wastewater treatment costs;
 - Sludge disposal costs;
 - Energy costs;

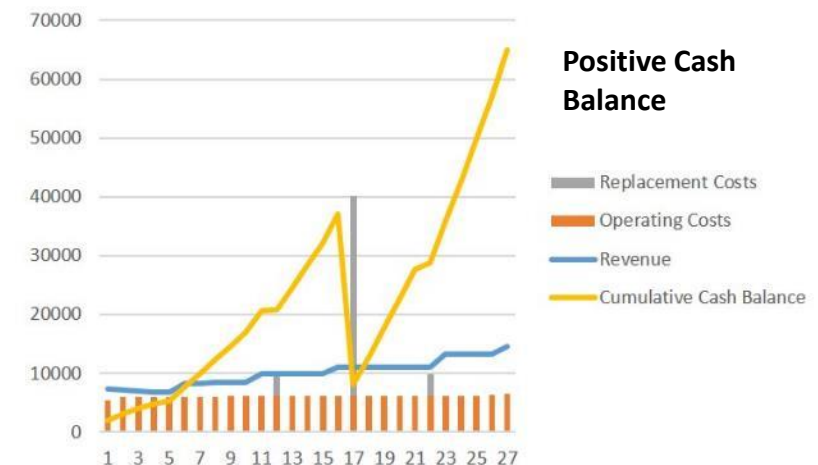
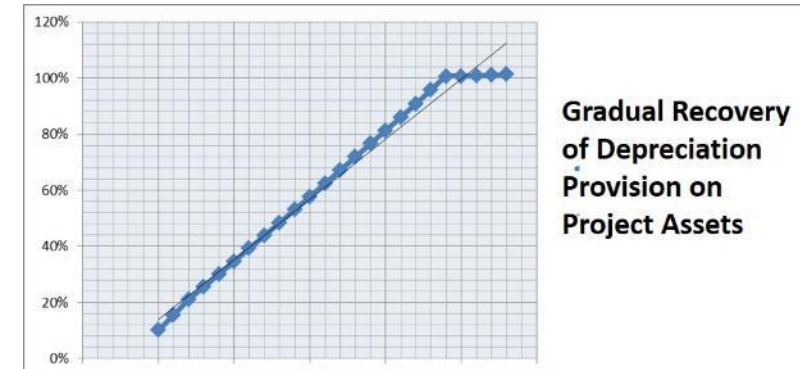
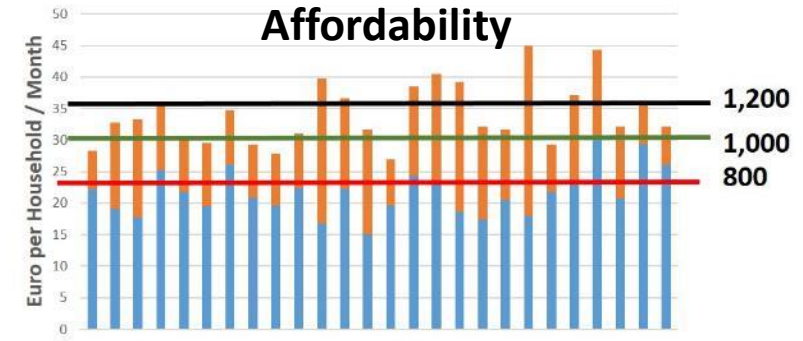
- **Funding Requirements**
 - Debt servicing costs / Internal co-financing needs;
 - Asset replacement



Future Needs : Ensuring Financial Sustainability

- **Criteria:**

- **Full cost recovery tariff within the evaluation period while remaining affordable;**
 - Affordability Thresholds;
 - Realistic Average Household Income Levels
- **Sufficiency to internally finance the replacement of project assets;**
 - Affordability v Sustainability with timing and degree of recovery of depreciation provisions
- **Cumulative positive cash balance;**



Concluding Remarks and Difficulties to Face

Issues	Needs
Internal Factors	
<ul style="list-style-type: none"> • Large Increase in Costs And Tariffs 	Project and system optimization
<ul style="list-style-type: none"> • Affordability of Services 	Gradual realization of full cost recovery tariff level as income levels increase
External Factors	
<ul style="list-style-type: none"> • Higher / Stricter Compliance Requirements 	Wastewater treatment and drinking water quality Sludge disposal options
<ul style="list-style-type: none"> • Regulatory Barriers and Political Willingness 	Independence

Possible Solutions

Issues	Needs
<ul style="list-style-type: none"> • Regionalisation / Cost Sharing 	Uniform tariffs across service areas; Economy of scale benefits
<ul style="list-style-type: none"> • Appropriately Sized Infrastructure 	Realistic population and economic development forecasts
<ul style="list-style-type: none"> • Phased Implementation and Compliance Deadline Requirements 	Staggered compliance adherence targets Funding availability and construction market capacity
<ul style="list-style-type: none"> • Green and Taxonomy Initiatives 	Energy efficiencies (including CO2 emissions) Efficient resource utilization (sustainable raw water use/availability; re-use of treated sewage & sludge)



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