

Achieving and maintaining financial sustainability of water utilities

Training tools and experience



February 3, 2022



Content



1. **Aquasan Network in BiH**
2. **D-Leap Access to Financing: Financing municipal water supply and sanitation services CD Program**
 - Objective
 - Target groups
 - Approach and Methodology
 - FMWSSS Modules
 - Initial CD Event and First Homework (Self-assessment)
 - Intermediate CD Event and Second Homework (Action plan)
 - Final CD Event
 - Ultimate goal
 - Additional values



Aquasan Network in BiH

- Association for Water and Environmental Protection in Bosnia and Herzegovina gathering experts from
- relevant state, entity and cantonal ministries, water agencies and environmental protection funds, local government units, utility companies, NGOs, research institutes, private sector, etc. aiming at:
 - ✓ **Capacity Development,**
 - ✓ **Advocacy and Lobbying for Sector Improvements,**
 - ✓ **Networking,**
 - ✓ **Promotion of the Sector.**



Aquasan Network in BiH

- **D-LeaP CD programs offered by Aquasan in BiH focused on:**
 - ✓ **Non-Revenue Water**
 - ✓ **Energy Efficiency**
 - ✓ **Asset Management**
 - ✓ **Access to Financing.**



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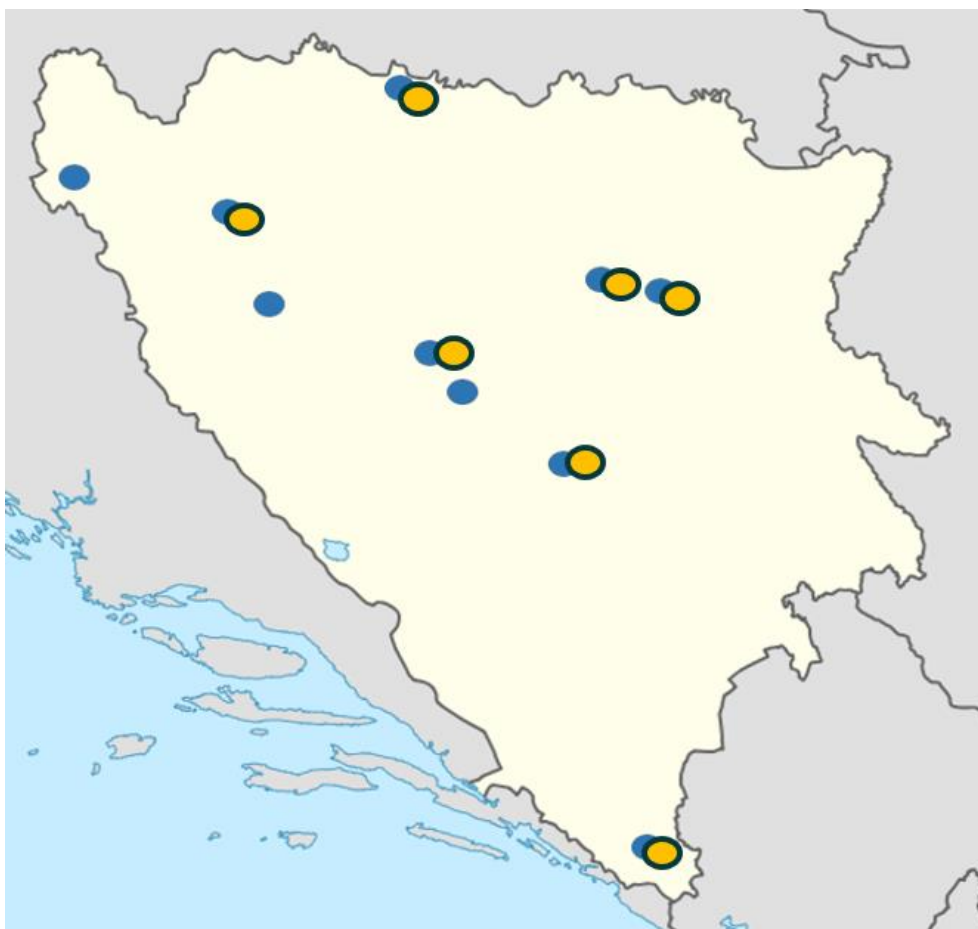
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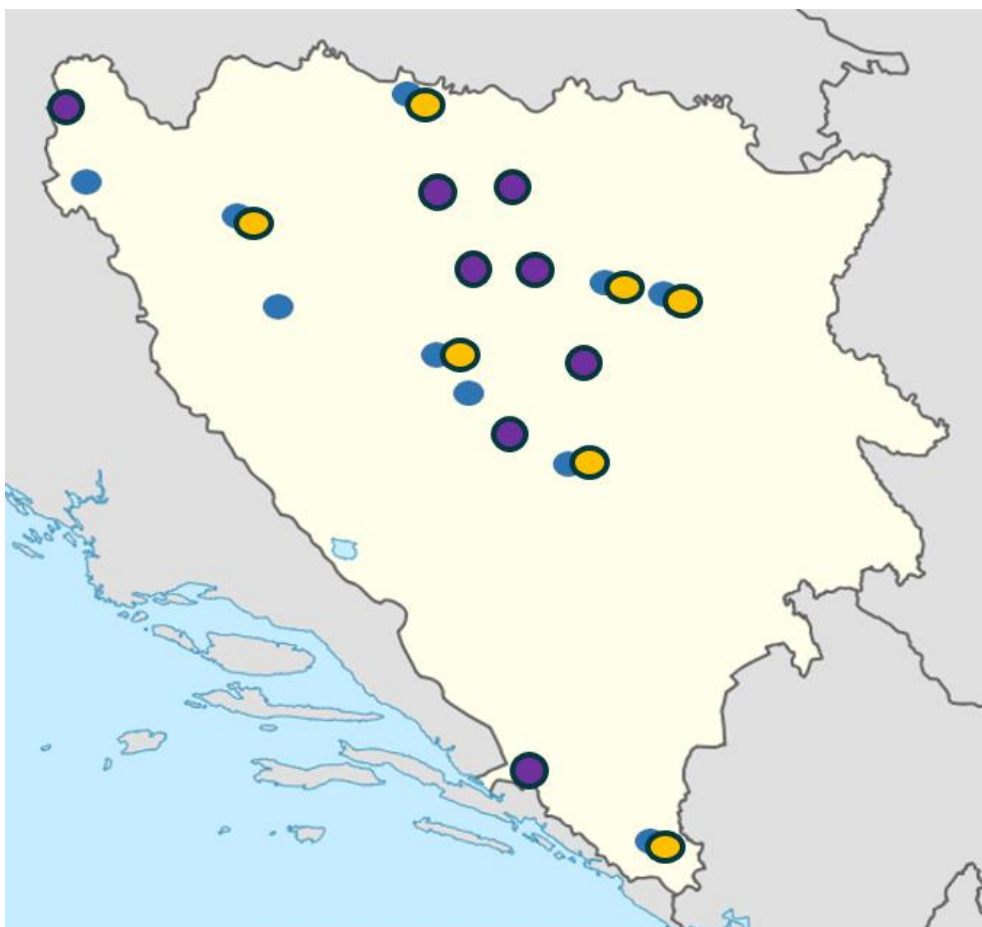


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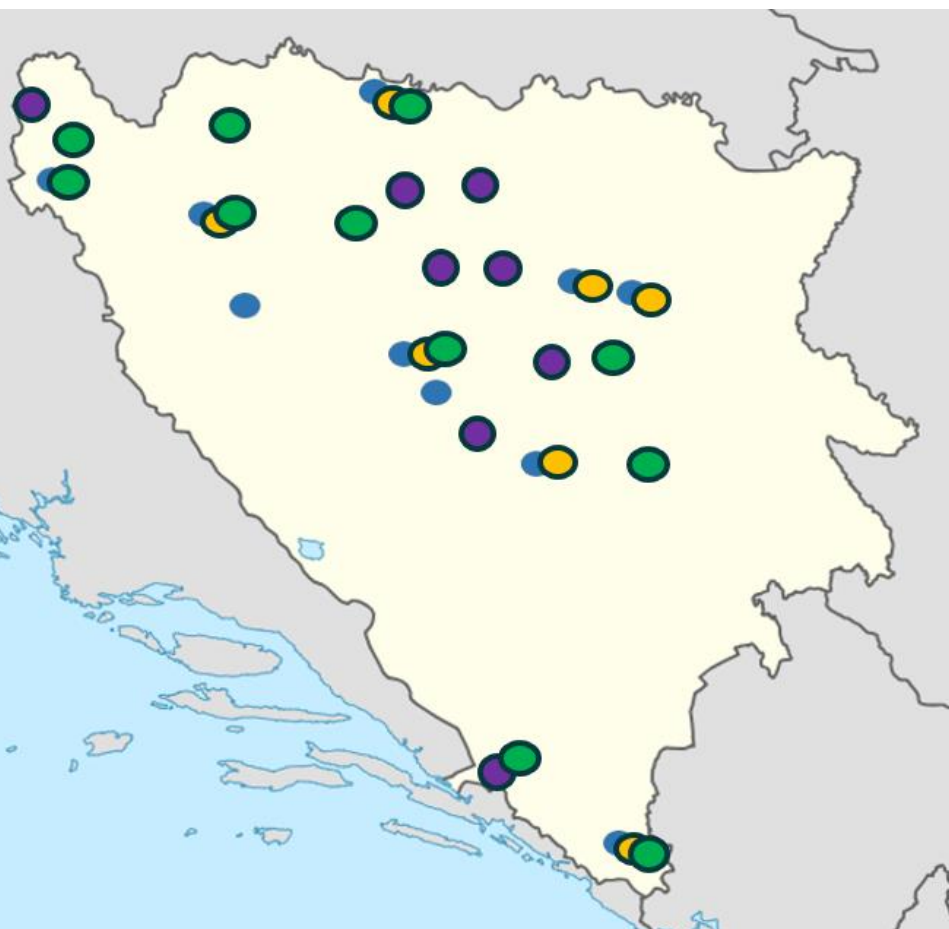
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- | Asset Management 2017 | Asset Management Gold 2018 |
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- Asset Management Silver Level 2018
 - Busovača
 - Kotor Varoš
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 - Neum
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 - Zavidovići



Asset Management 2017

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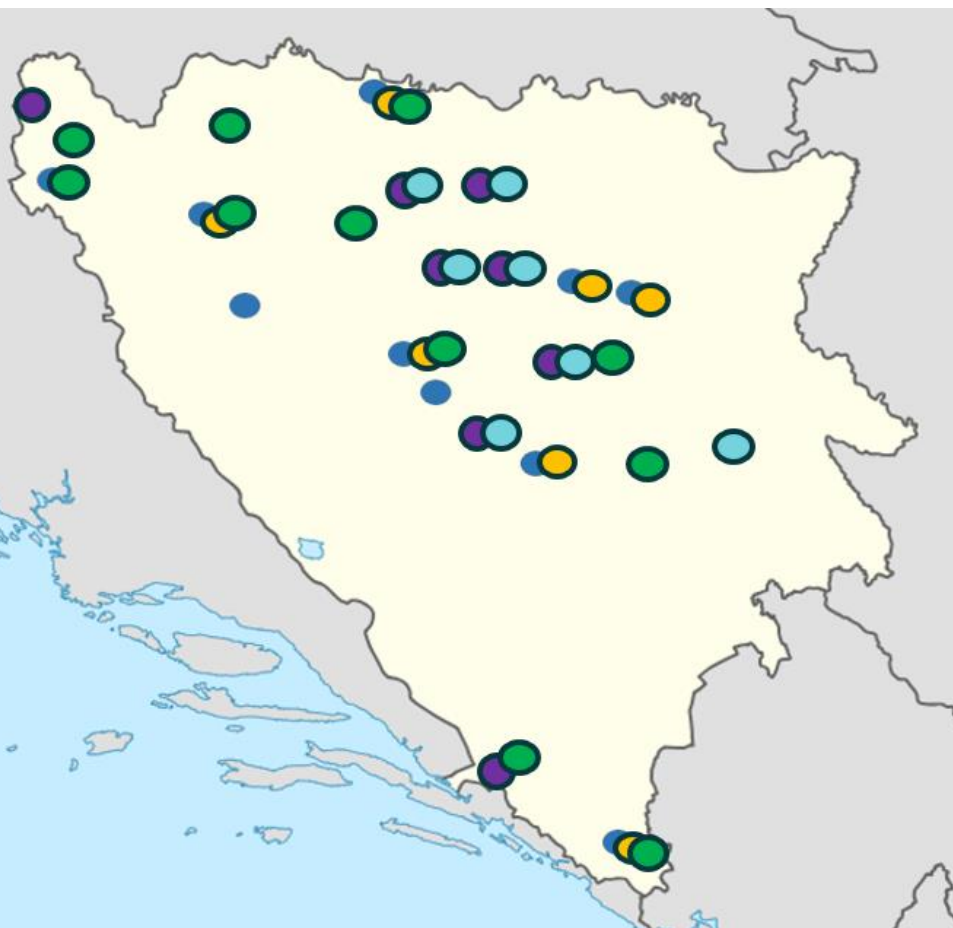
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Non-Revenue Water 2017

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Asset Management 2017

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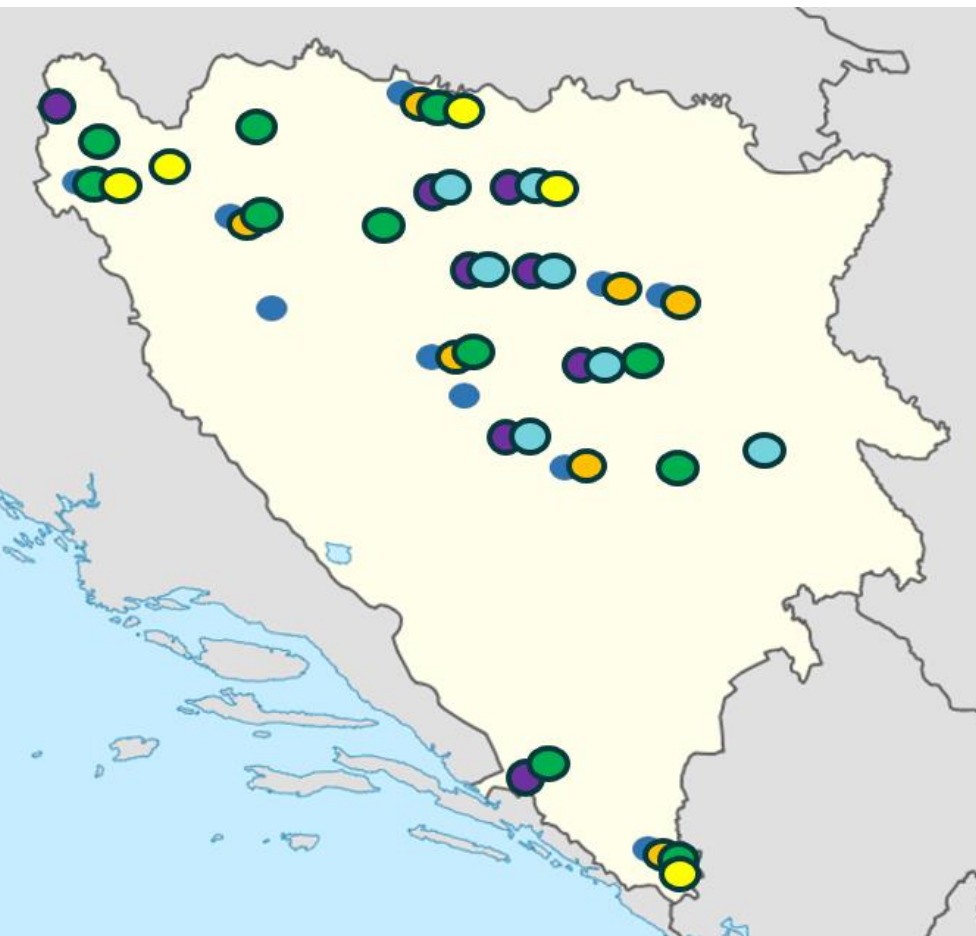
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Non-Revenue Water 2017

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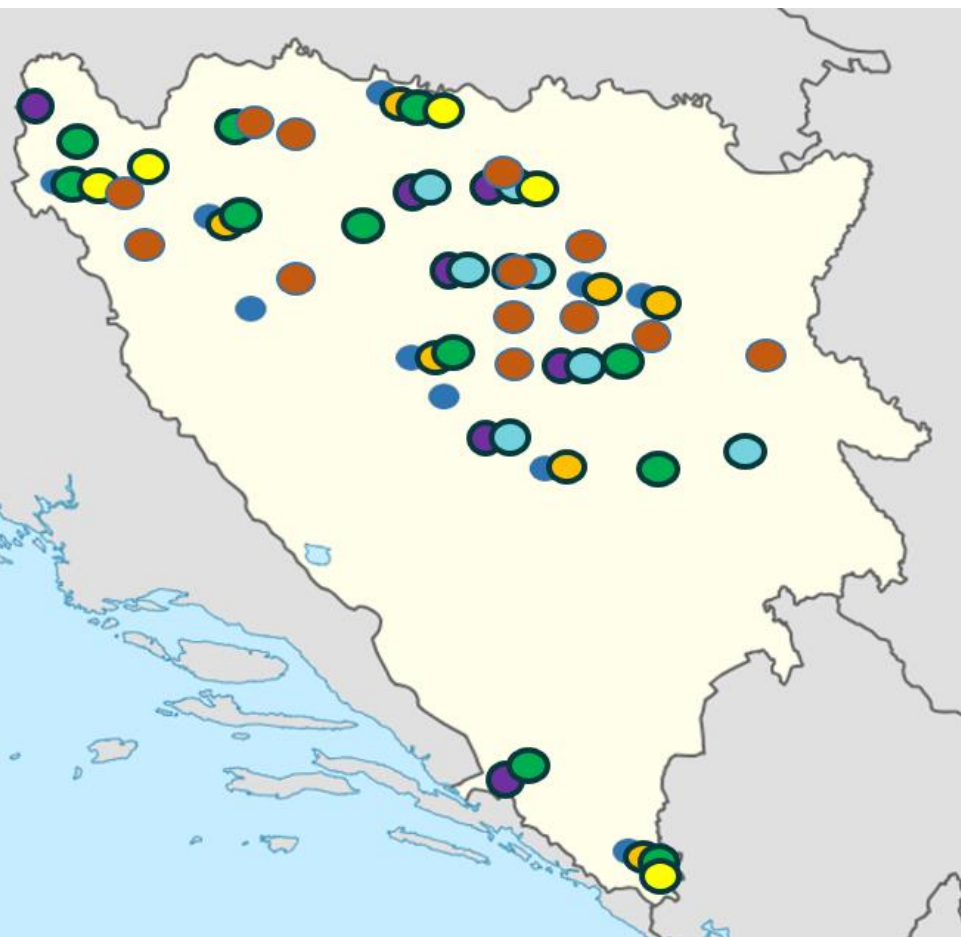
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Non-Revenue Water 2017

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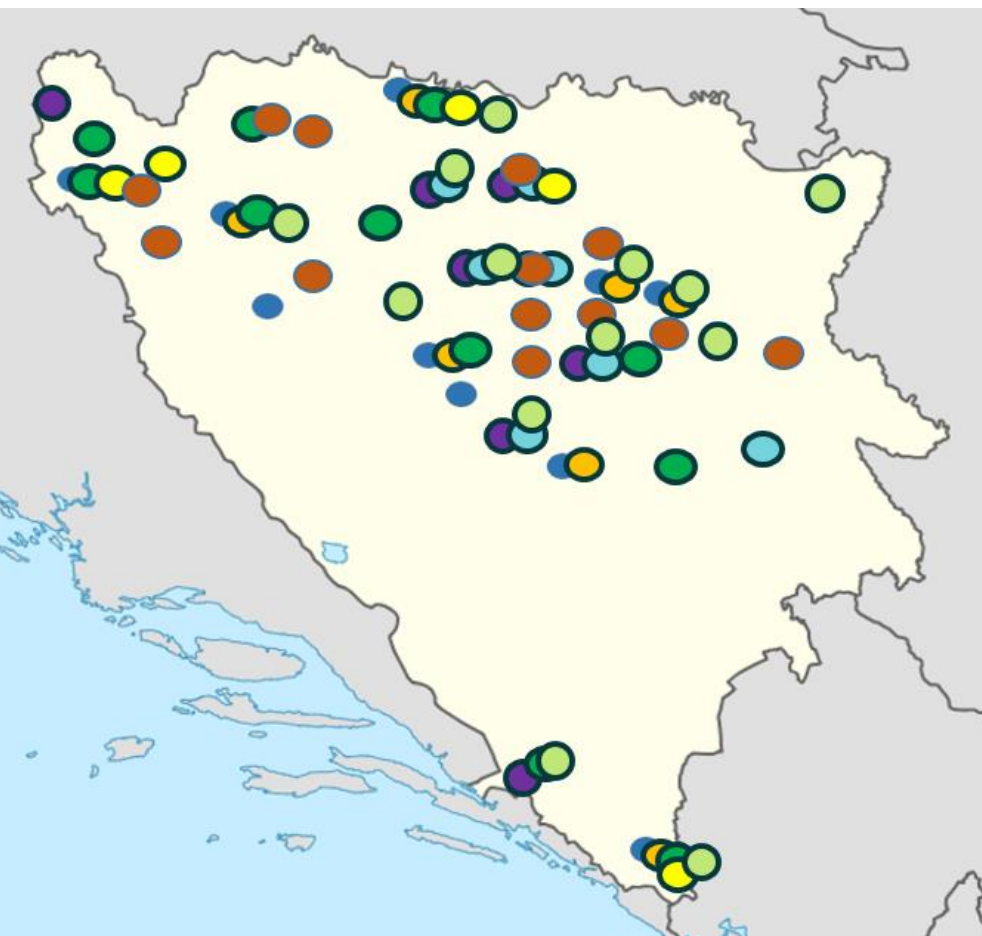
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Non-Revenue Water 2019

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Asset Management 2017

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Energy Efficiency 2018

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Trebinje

Non-Revenue Water 2017

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Non-Revenue Water 2018

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Non-Revenue Water 2019

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Asset Management All Levels 2019

Bijeljina
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Kotor Varoš
Laktaši
Prnjavor
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Aquasan Network in BiH



Enhanced capacities resulting in measurable improvements of operational and financial performance



Lack of awareness about the need to invest in capacity development



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D-LeaP Access to Financing: Financing Municipal Water Supply and Sanitation Services CD Program

Water Supply and Wastewater management services Reform in BiH

Changed approach of International partners in BiH



- ✓ The emphasis is now placed on **stabilizing and improving the performance of the utility**
- ✓ Projects are aimed at **strengthening municipalities and utility's capacity for sustainable development**
- ✓ **Institutionalization of the participatory process** is recognized as essential for continuity after programming period
- ✓ International partners direct their investments to utilities that have **the capacity to maintain and use the investment in the future**

D-LeaP Access to Financing: FMWSSS CD Program

- Based on training materials developed by World Bank:
 - ✓ **Water Utility Performance and Finance Course** and
 - ✓ **Creditworthiness Course.**
- Upgraded for developed tools by Aquasan Network in BiH – Self-assessment tool, Action plan for reaching financial sustainability.
- Adjusted and improved to fit the BiH context and to be easily adjusted for other countries in the region.
- For contextualization of materials to the BiH context, Aquasan Network in BiH used its national and regional experiences and practices.



Objective

Enhance competence of LGUs and PUCs on how to reach financial sustainability and make informed financial decisions on accessing different sources of financing for improved delivery of water services.





Target Groups

Target Group 1: Decision Makers

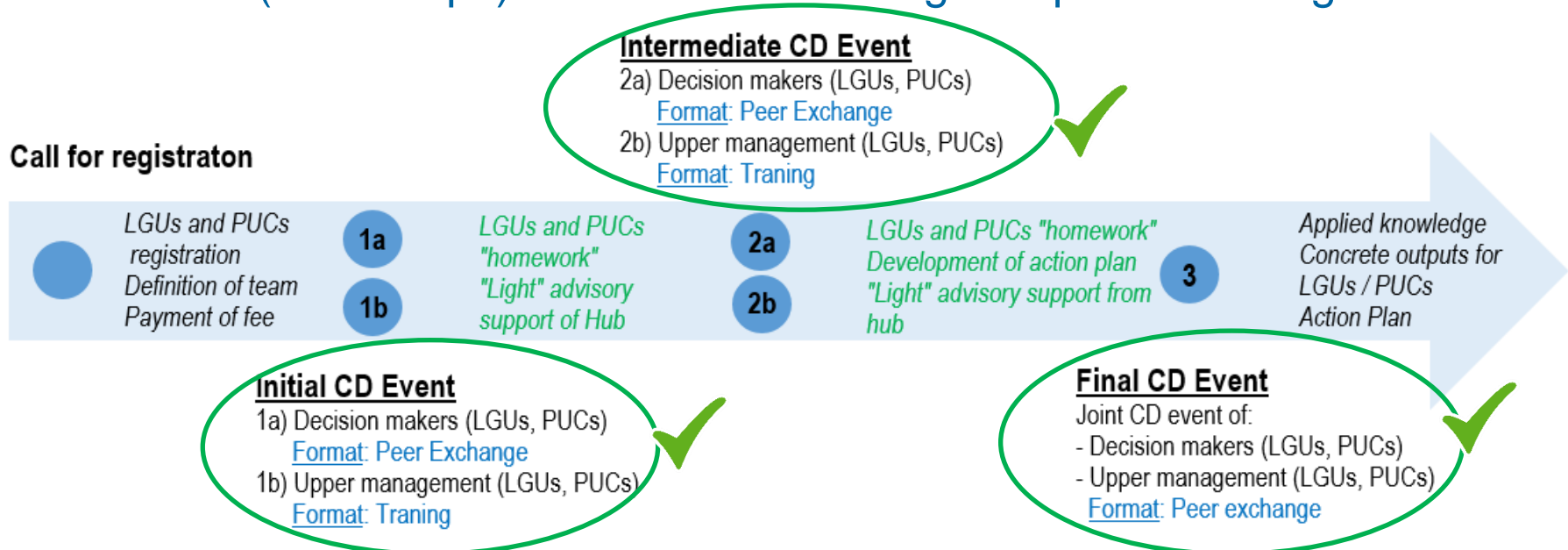
- LGUs: Mayors, Municipal Counsellors, Heads of Financial Departments, Members of PUC Supervisory Board
 - PUCs: General Managers, Finance Managers, Members of PUC Management / Supervisory Board
-

Target Group 2: Upper Management

- LGUs: Heads of Communal Affairs Department, Heads of Planning and Analysis Department, Heads of Development Department
 - PUCs: Staff from Economic and Finance Department, Heads of Planning and Analysis Department, Heads of Development Department, Heads of Accounting Department
-

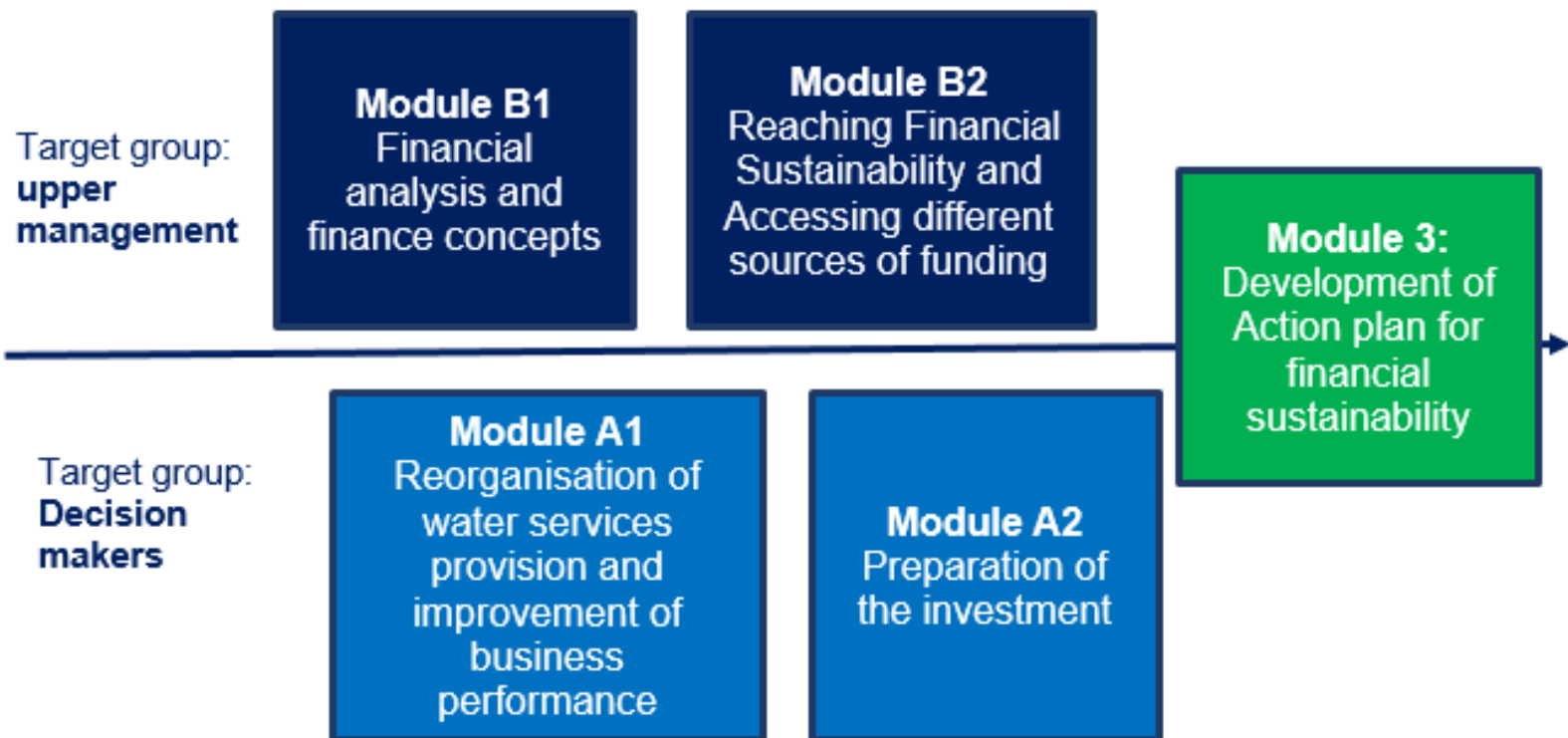
Approach & Methodology

- Delivery follows the standard three-workshop D-LeaP cycle with homework and trainers' support in-between
- Events (workshops) formatted as training and peer exchange





FMWSSS Modules



Initial CD Event



Group work of representatives of **Upper management**



Representatives of **Upper management** from PUCs and LGUs



Presentation of the **Results of Group work**



Representatives of **Decision makers** of LGUs and PUCs



First Homework

1. Evaluate information and data from PUC financial statements and enter them in the Excel-based performance evaluation tool to calculate operational and financial indicators;
 2. Analyse the operational and financial indicators,
 3. Analyze descriptive indicators;
 4. Draw a conclusion on PUC financial and operational performance;
- **19** PUC completed, in cooperation with their LGUs, and submitted the self-assessment tools.



First Homework

Operational performance

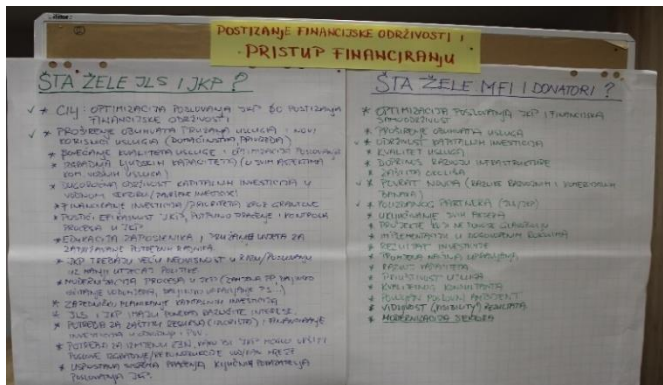
INDICATORS		2018	2019	2020	AVERAGE
Access to services	Coverage by the public water supply service (%)	86.81%	86.85%	87.49%	87.05%
	Coverage by the wastewater collection (%)	39.93%	40.32%	44.54%	41.60%
	Coverage by the wastewater treatment service (%)	39.93%	40.32%	44.54%	41.60%
	Produced water (litters / persons / day)	729.2	540.7	505	591.63
Quality of services	Continuity of service (hours / day)	23.86	23.87	23.85	23.86
	Water pressure in the distribution network (bars)	4	4	4	4
Water quality	Residual chlorine (% of samples tested)	100%	100%	100%	100%
	Bacteriological quality of water (% samples that passed the test)	98.50%	99.10%	98.80%	98.80%
	Chemical quality of water (% samples that passed the test)	97.30%	99.40%	97.30%	98.00%
Measurement	Level of measurement	97.64%	94.61%	92.90%	95.05%
Non-revenue water	Non-revenue water (%)	72.51%	62.33%	58.01%	64.28%
Network status	Number of failures on pipes (number of failures per kilometre of pipeline)	1.87	2.43	2.26	2.19
	Sewer system blockages (number of blockages per kilometre of sewer pipes)	2.27	2.34	2.13	2.25
	Number of illegal connections detected by PUCs / PUCs during the year	1	2	1	1.33
Employees	Number of employees in PUC per 1,000 inhabitants - service users	3.19	3.25	3.18	3.21
	Number of JVP / JKP employees per 1,000 connections	11.85	11	10.36	11.07
Asset management	Assets recorded in the business books(%)	100%	100%	100%	100%
Affordability of tariffs	Affordability of water service tariffs (%)	2.09%	2.03%	2.19%	2.10%

First Homework

Financial performance

INDICATORS		2018	2019	2020	AVERAGE
Liquidity indicators	Accelerated liquidity indicators	4.54	4.43	4.04	4.33
	Working capital	1,682,566	1,731,612	1,914,002	1,776,060
	Current liquidity ratios	6.32	6.5	5.55	6.12
Coverage ratios	Debt coverage indicator	1.43	1.54	0.87	1.26
	Cash flow coverage indicator			22.33	
	Debt-to-equity ratio	0.04	0.04	0.09	0.06
Efficiency ratios	Collection efficiency	86.15%	85.65%	81.64%	84.48%
	No of days for collection	65.70	75.95	85.51	74.06
Productivity ratios	Average cost per employee	62%	62%	64%	63%
	Share of employee cost in operating revenues	62.08%	62.44%	63.73%	62.75%
Profitability ratios	EBIT margin	0.29%	0.54%	0.96%	0.6%
	Net profit margin	0.00%	0.27%	0.59%	0.3%
	ROE	0.00%	0.14%	0.33%	0.2%
	ROA	0.00%	0.14%	0.32%	0.2%
	EBITDA margin	13.46%	13.73%	13.70%	13.6%
Cost-effectiveness indicators	Relationship between operating income and operating expenses	0.93	0.98	0.98	0.96
	The cost of electricity as % OPEX	10.75%	9.02%	8.01%	9.3%
	Employee costs as % OPEX	57.82%	61.17%	62.59%	60.5%

Intermediate CD Event



Results of the joint discussion of Decision makers



Representatives of **Decision makers** of LGUs and PUCs



Group work of representatives of **Upper management**



Representatives of **Upper management** from PUCs and LGUs



Presentation of the **Results of Group work**



Second Homework



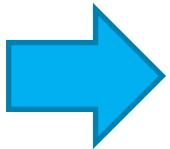
Based on the previous self-assessment of performance, develop an **Action plan** for achieving financial sustainability so it is:

- Concrete,
- Measurable and comparable,
- Realistic, and
- Time-bound.





Why Action Plan?



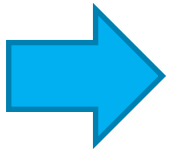
Achieving financial sustainability

- **Improvement of operational indicators:** NRW reduction, energy efficiency, network metering, number of employees, etc.
- **Improvement of financial indicators:** Liquidity, profitability, productivity, cost efficiency, etc.

**Process
led by PUC**



Why Action Plan?

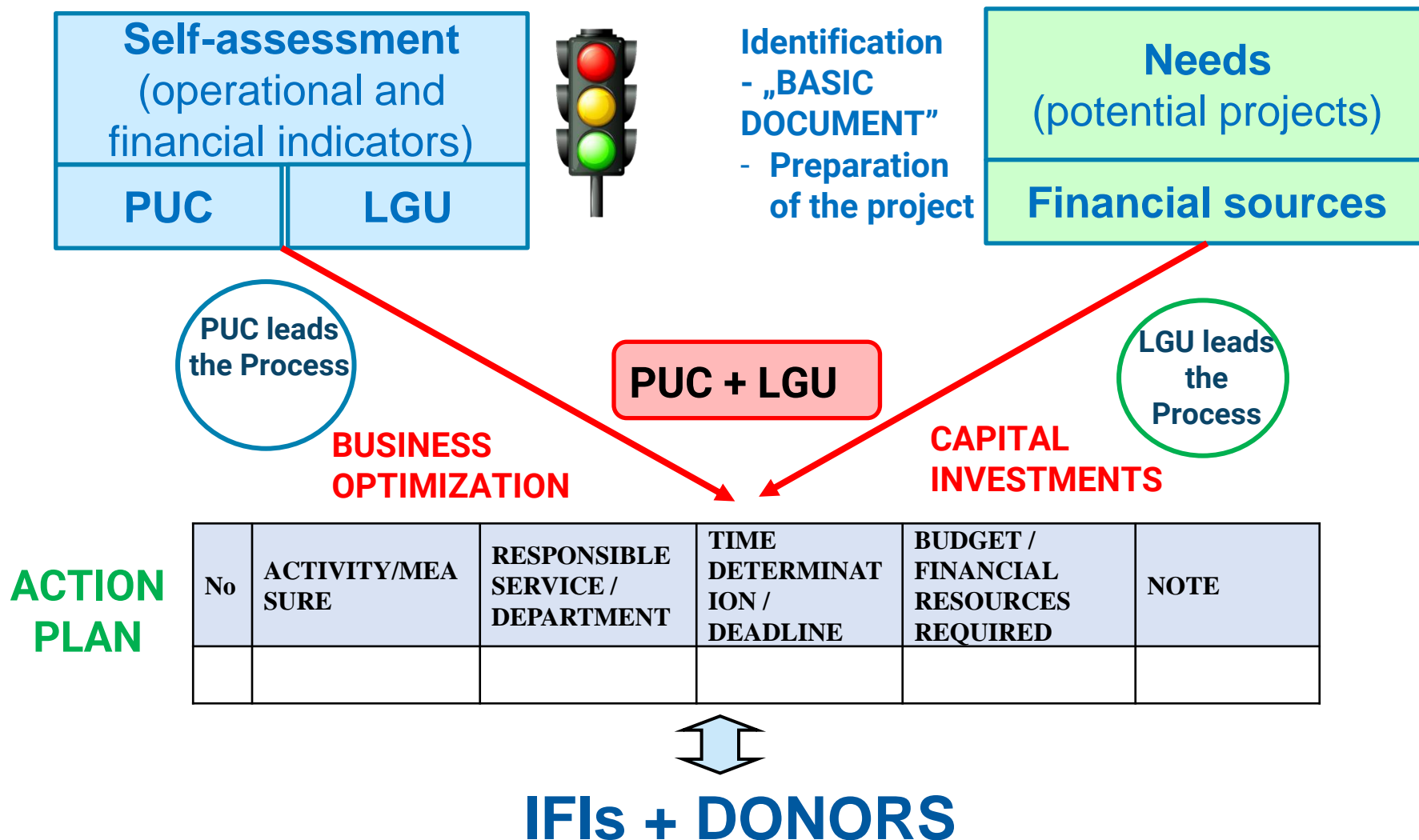


Path towards access to financing

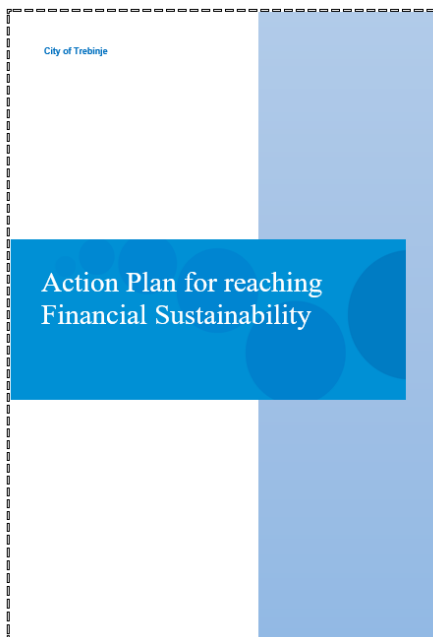
Preparation and implementation of capital investments:

- Expanding the network and increasing the number of service users,
- Improving the quality of services (reliability, etc.),
- Drinking water quality,
- Wastewater collection and treatment, etc.

**Process
led by LGU**



Action plan



- For development of plan, participants have used the knowledge that they have collected through the Initial and Intermediate CD Event
- „Light“ advisory on request of LGUs and PUCs was provided
- **16** developed Action plans for reaching financial sustainability

RESULT OF CONDUCTED SELF-ASSESSMENT		STRATEGIC GOAL	TARGET VALUE
1.	Average salary cost per employee is higher than optimal (currently 50%)	To optimize salary cost per employee till the end of 2022	<50%
2.	The cost of el. energy as% OPEX (currently 56.08%)	To optimize costs of electricity	<50% by the end of 2025
3.	Water supply coverage (currently 61.29%)	Expand the comprehensive area	> 80 % by the end of 2026
4.	Wastewater collection coverage (currently 23.27%)	Expand the comprehensive area	>50 % by the end of 2026



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Final CD event





Ultimate Goal



Create instrument for cooperation with IFIs

- **Education of employees** (individual capacities)
- **Action plan** (organizational capacities)
- **Collaboration of LGUs and PUCs** (institutional capacities)

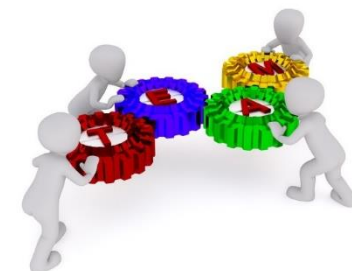
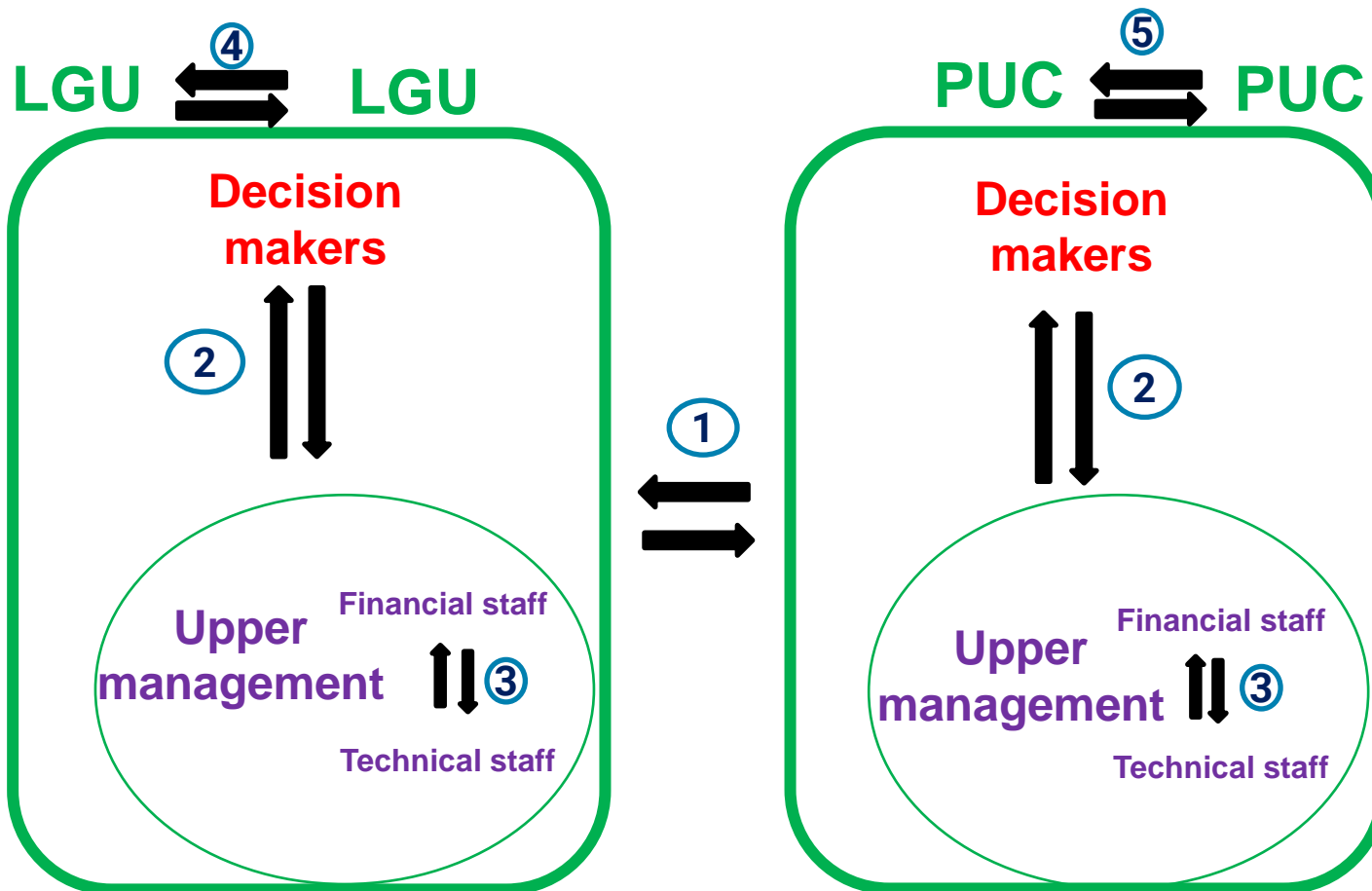


Contribute to creating a reliable partner for IFIs



Achieve a better understanding on how to prepare and implement capital infrastructure investments

Additional Values



Cooperation on five levels:

- ① LGUs and PUCs
- ② Decision makers and upper management
- ③ Financial and technical staff
- ④ Amongst LGUs
- ⑤ Amongst PUCs

Additional values

- **High commitment and active engagement** of the participants in CD events and homework.
- Linking technical and financial performance as well as having **representatives of LGUs and PUCs** work together through the Programme.
- Having two different target groups – **decision makers** and **upper management** has proven a good practice for it enables tailored-made approach responding to specific needs of each target group.
- Customized, **tailored-made thematic tasks** for participants - „**learning by doing**” principle.
- The need to conduct **business performance analyses and cost-effectiveness analysis** is recognised as a precondition for PUC sustainability.

Additional values

- The importance of preparing **Action plan (primary for “soft” for activities) reaching financial sustainability** has been recognized as a requirement for sustainability of water services and PUCs in the future, and in order to create **conditions for realisation and sustainability of capital investments**.
- Program could be used as a “**pre-assessment**” exercise of those LGUs and PUCs that are looking for a loan; it could be easily implemented to evaluate their performance and commitment to improvements.
- The Program **can be combined with other programmes** that are being implemented or are planned to be implemented in BiH, such as a MEG Project, BiH Water and Sanitation Services Modernization Project or Utility of Future.
- Applicable for the implementation in **other countries in the SEE**.

Thank You!



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