Towards a realistic financing strategy for water and sanitation sector in urban and rural areas of Georgia

Ministry of Economic Development of Georgia

Mr Grigol Kakauridze

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Major conclusions

Costs of doing nothing are high

- Cost of Baseline Scenario (or "business-as-usual") is approximately same as cost of Development Scenarios over a period of 20 years because increased capital expenditure needs in Development Scenarios are compensated by savings in Operation & Maintenance gained via new investments

Four key policy measures available to close the financing gap

- Collection rate
- Tariffs
- Public budget support
- International assistance (ODA)

Baseline Scenario - definition

Main objective of the Baseline Scenario is to estimate expenditure needs in order to maintain existing service level and then to confront such expenditure needs with available Baseline Supply of Finance. Needed expenditure would include:

- Operation & Maintenance costs at the **required** levels (not at the current levels)
- **Minimum required investments** in the form of re-investment for renewal of the worn-out assets

Baseline Scenario might involve certain policy choices. For example:

- New investments might be needed when population is growing fast (to maintain current coverage level)

Baseline Scenario - financing gap in Georgia WSS

Category	Urban	Rural
Total accumulated expenditure needs	GEL 5.44 billion	GEL 418 million
Total accumulated supply of finance	GEL 2.58 billion	GEL 305 million
Total accumulated financing gap	GEL 2.86 billion	GEL 121 million

Financing gap exists

Available baseline supply of finance less than 50% of needed expenditure, hence, without changes in policy measures existing service levels cannot be maintained

Baseline Scenario - financing gap in Georgia WSS

Combination of policy measures that can help to close the financing gap:

- Increase collection rate to 90% in 2011
- Increase tariffs to the level of 3,5% of average household income gradually reaching needed level in 2020
- Increase government contribution from 0,6% to 1,9% of consolidated budget
- Maintain high level of international assistance

Development Scenarios - Urban scenario definitions

Urban WSS	Scenarios			
	1	2	3	4
Increase coverage of centralized water and wastewater collection	x	x		
Increase of coverage in order to meet MGD targets in WS and Sanitation	x	x	x	x
Rehabilitation and replacement of water and sewer network	x	x	x	x
Water loss reduction and reduction in water consumption	x	x	x	x
Rehabilitate and increase water and wastewater treatments	x			
Rehabilitate water and wastewater treatment plants	x	x		
Rehabilitate water treatment plants	x	x	x	
Improve regularity of water and wastewater collection	x	x		
Improve energy efficiency in WS and WW sectors	x	x	x	

Each of the above scenario presumes set of technical measures to improve quality of services

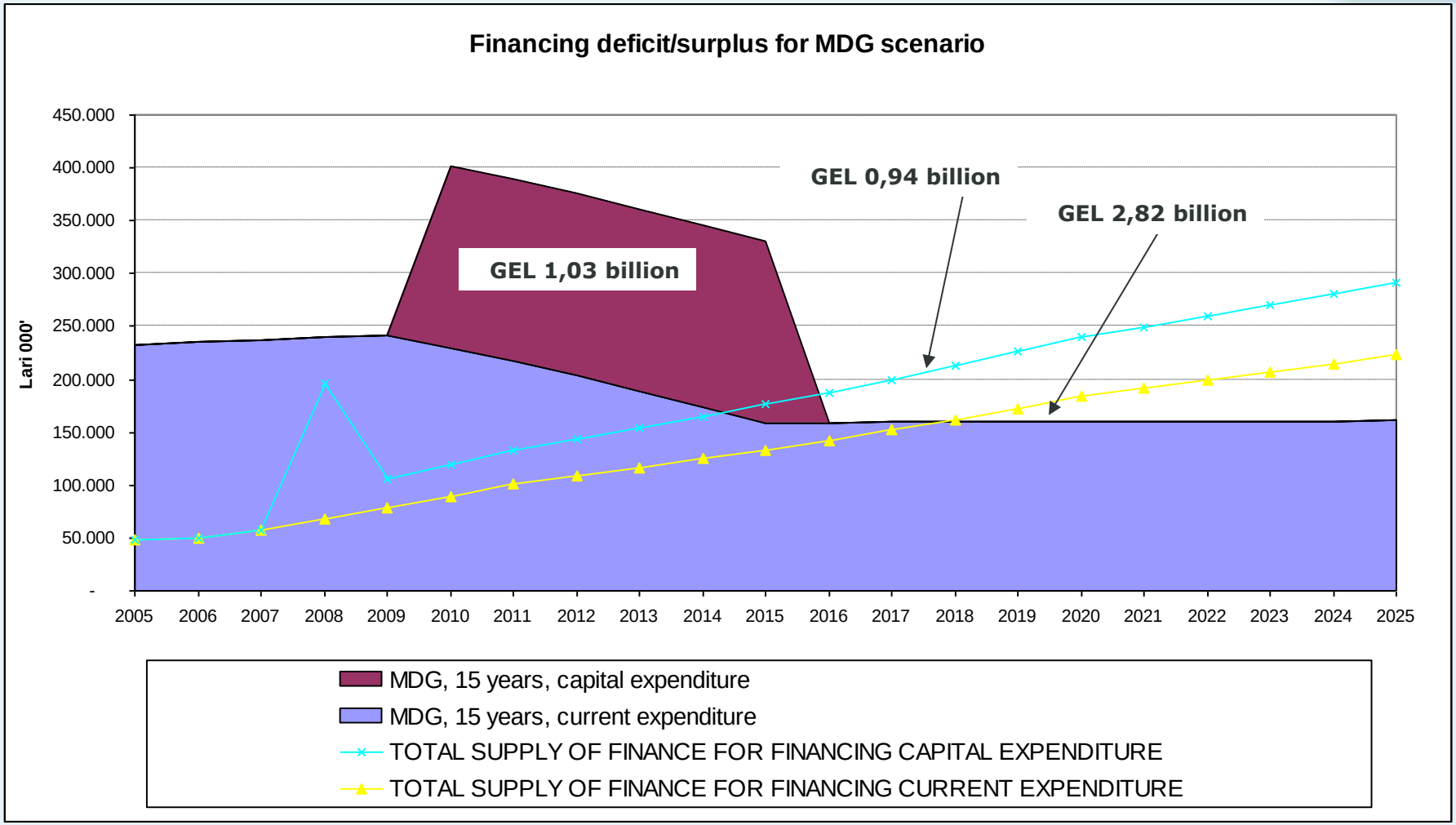
Scenario 1 is the most ambitious (full infrastructure rehabilitation and new construction

Development Scenarios - Urban scenario, modelling results

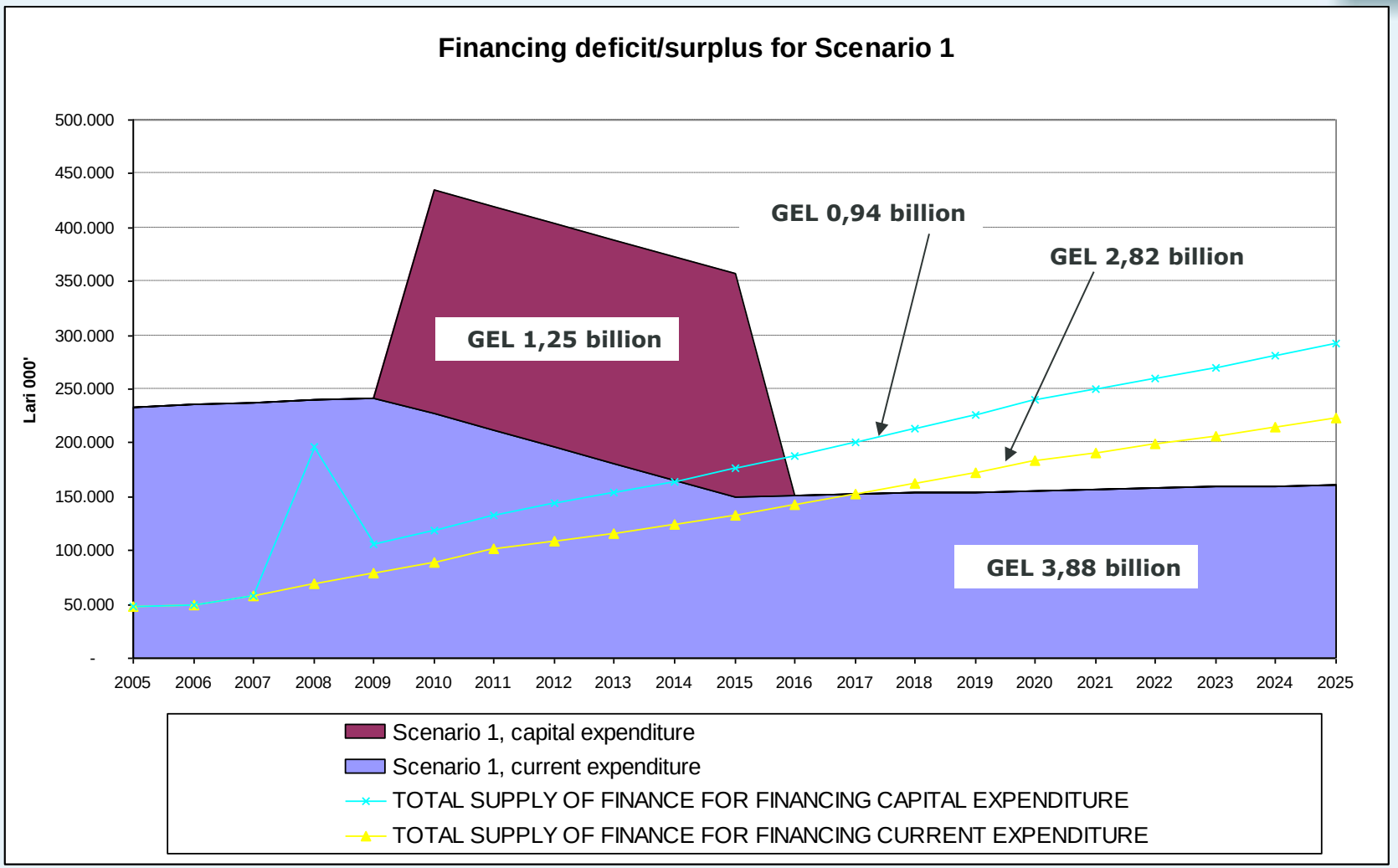
GEL billion	MDG, 2015[1]	Scenario 1, 2015[1]
Total Expenditure Needs	**5,00**	**5,13**
Current expenditure need	*3,96*	*3,88*
Capital expenditure need	*1,03*	*1,25*
Total Supply of Finance	**3,77**	**3,77**
Supply of finance for current expend iture	*2,82*	*2,82*
Supply of finance for capital expenditure	*0,94*	*0,94*
Total Financial Deficit(-)/Surplus(+)	**-1,23**	**-1,36**
Current supply of finance deficit/surplus	-1,14	-1,06
Capital supply of finance deficit/surplus	-0,09	-0,30

1) MDG, 2015 implies that new investment programme for a given scenario is planned to be completed by 2015. Similarly for Scenario 1. The total expenditure needs however (in particular O&M and reinvestment) are assessed for the entire period under consideration, namely 2005-2025.

Development Scenarios - MDG scenario, modelling result



Development Scenarios - Scenario 1, modelling result



Development Scenarios - Measures to close financing gap in urban areas

Maesures	MDG Scenario	Scenario 1
Required Collection increase	44% -> 90% в 2011	44% -> 90% в 2011
Gradual tariff increase	1,5% -> 3,5% в 2020	1,5% -> 3,5% в 2020
Budget contribution	1,7% of consolidated budget	1,76% of consolidated budget
International assitance	GEL 5 million*	GEL 16 million*

*) on an average annual basis

Tariff increase is in terms of percentage of average household income

Development Scenarios - Rural scenario definitions

Rural WSS	Scenario			
	1	2	3	4
Upgrade 50% of existing WS and WW service level to the next one compared to the base year	na	x		
Rehabilitation of water intakes and WS treatment plants	na	x	x	
Improve energy efficiency	na	x	x	
Reduce not-improved water supply from 40% to 16%	na	x	x	x
Reduce not-improved sanitation from 11 to 3 %	na	x	x	x
Change of technology in water and sanitary delivery	na	x	x	x

Each of the above scenario presumes et of technical measures to improve quality of services

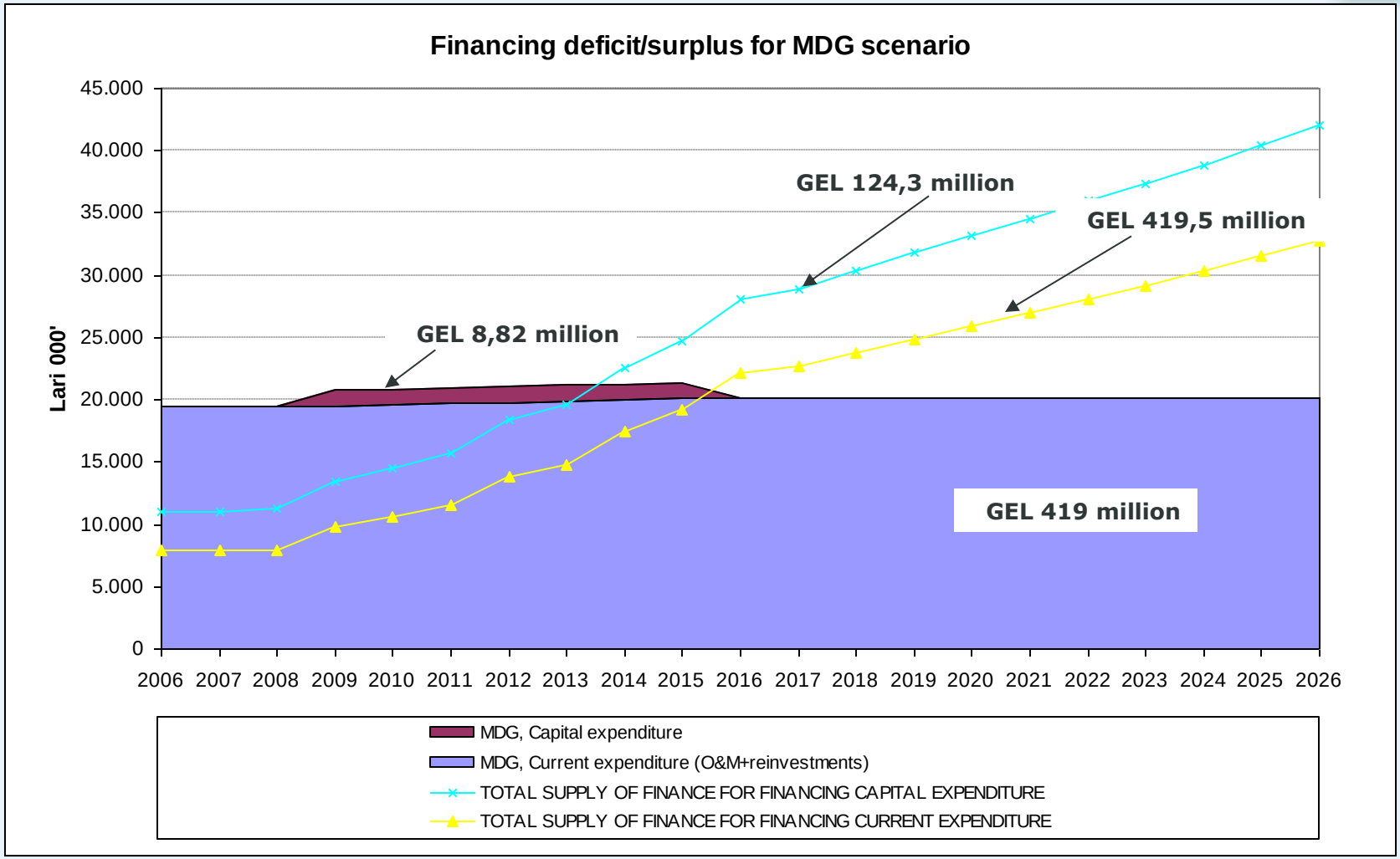
Scenario 2 - most ambitious - advanced water supply and sanitation technologies

Development Scenarios - Rural scenario, modelling results

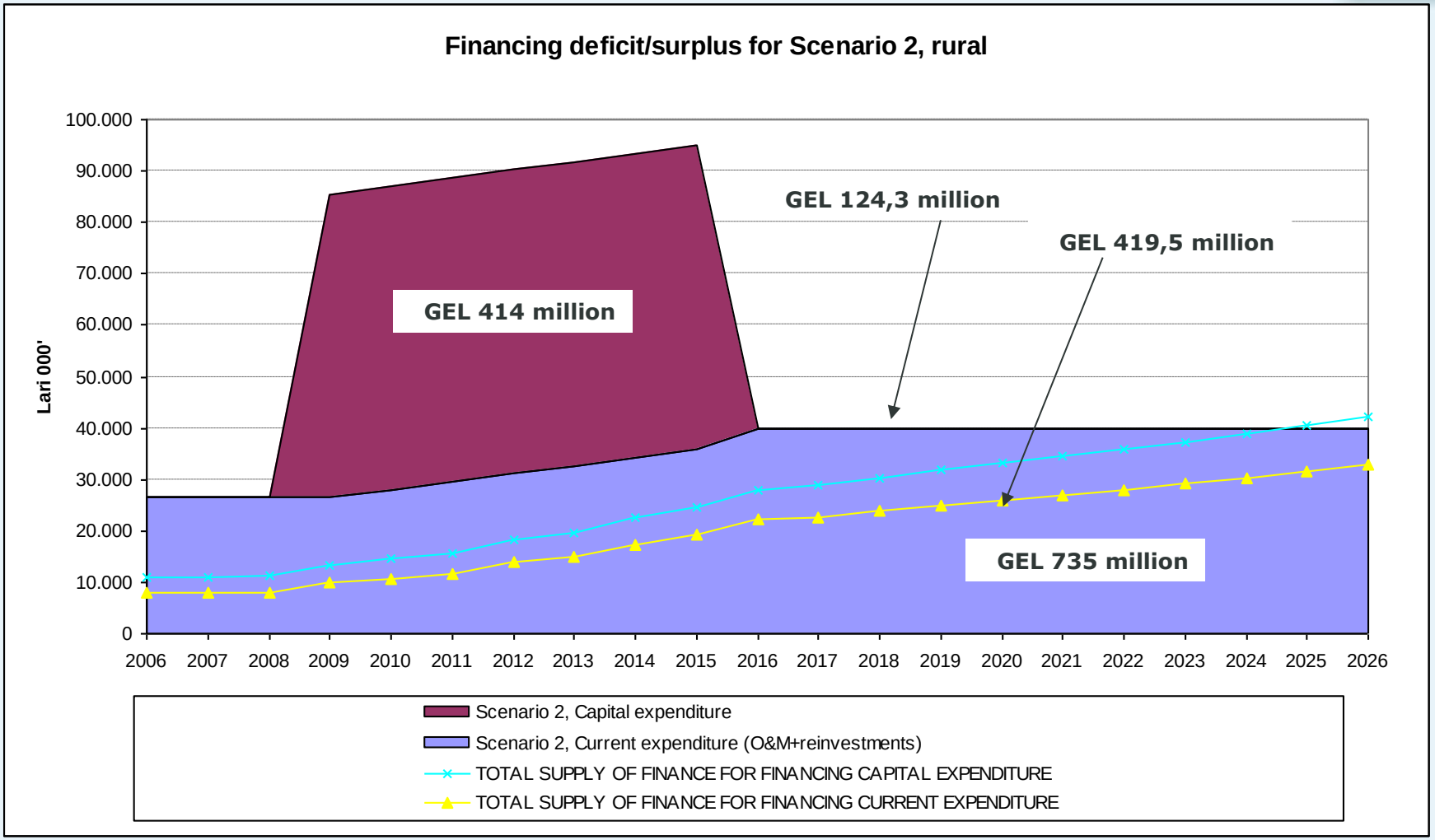
GEL million	MDG scenario, Scenario 4	Scenario 3, 15 years	Scenario 2, 15 years
Total Expenditure Needs	**428,09**	**770,17**	**1.148,26**
Current expenditure need	*419,27*	*565,09*	*734,55*
Capital expenditure need	*8,82*	*205,07*	*413,71*
Total Supply of Finance	**543,88**	**543,88**	**543,88**
Supply of finance for current expenditure	*419,54*	*419,54*	*419,54*
Supply of finance for capital expenditure	*124,34*	*124,34*	*124,34*
Total Financial Deficit(-)/Surplus(+)	**115,79**	**-226,28**	**-604,38**
Current supply of finance deficit/surplus	0,27	-145,55	-315,01
Capital supply of finance deficit/surplus	115,52	-80,73	-289,37

* MDG, 2015 implies that new investment programme for a given scenario is planned to be completed by 2015. Similarly for Scenario 1. The total expenditure needs however (in particular O&M and reinvestment) are assessed for the entire period under consideration, namely 2005-2025

Development Scenarios - MDG scenario, modelling result for rural areas



Development Scenarios - Scenario 2, modelling result for rural areas



Development Scenarios - Measures to close financing gap in rural areas

Measures	MDG scenario	Scenario 2
Share of rural households paying for services	50% -> 90% in 2011	50% -> 90% in 2011
Required gradual tariff increase	0,5% -> 1,0% in 2020	0,5% -> 1,0% in 2020
Public budget contribution (additional to the level presumed by Scenario 1 in urban)	at the current level	0,44% of consolidated budget*

*) on an average annual basis

Tariff increase is in terms of percentage of average household income

Decisions made by the Government of Georgia

- merge of local water companies into 3 regional companies based on institutional, tariff and regulatory reform
- considerable localisation of operational and rehabilitation capital for reforms financing
- establishment of viable companies to attract private sector

Main objectives of reforms

Parameters	Existing situation	Objective
Uninterrupted service provision	unstable	Provision of uninterrupted service
Quality of drinking water	Incompliance with WHO standards	Compliance with WHO standards
Operational stability	unstable	stable
Financial stability	Negative financial balance	profitability
Installation of water meters (industry, households)	No water meters, inefficiency of water companies	Water meter installed, costs reduced

Required capital costs (mln. USD) for the three regional companies

Rehabilitation	405
Operational equipment	15
Assets replacement	3
Capacity building	1
Working capital (5 years)	14
Total required	**438**

Участие частного сектора

на первом этапе реформы частный сектор, ориентированный на прибыль, не примет участия в оперировании предприятий, из-за того, что региональные компании не смогут окупить затраты

концессионные и арендные договоры должны быть оформлены после осуществления реформы.