



РЕПУБЛИКА СРБИЈА
МИНИСТАРСТВО ЖИВОТНЕ СРЕДИНЕ,
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По мери природе

Directive on landfill of waste Progress in developing Directive Specific Implementation Plan

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The Landfill Directive

- The National Environmental Approximation Strategy (NEAS) was adopted by the Serbian Government on 13th October 2011. It stipulates that Directive Specific Implementation Plans (DSIPs) would need to be developed.
- Work by the EU-funded consultants on the DSIPs for 6 directives (Landfill, Urban Wastewater, Industrial Emissions, National Emission Ceilings, Emission Trading and Noise Framework Directive) is due to be complete by the end of April 2012.
- The information being presented comes from the Draft DSIP developed with the support of the EAS project team.
- It is not a finished document. The MEMSP will develop it further to work down to the regional and project level as described below.

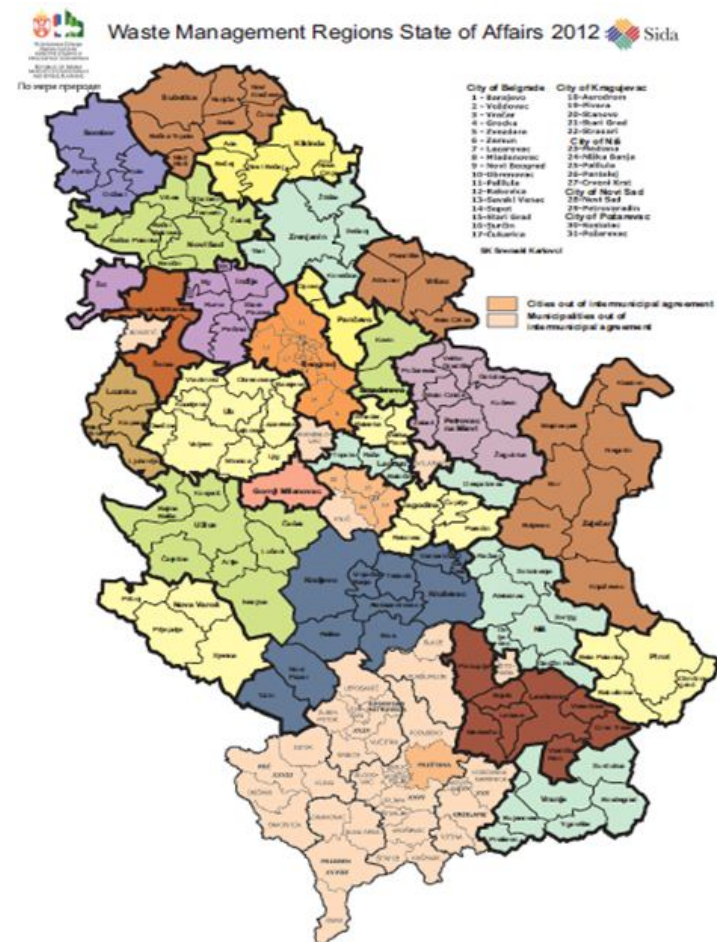


Implementation of the directive (1)

- Considerable progress has been made with transposition being almost complete
- Implementation of this directive remains core of investment programmes in waste sector in Serbia
- Waste landfilling was and remains prevailing method of waste management. According to various assessments, there are about 160 registered landfills and about 4500 wild dump sites, which are required to be closed or upgraded
- Implementation of investment projects developing “modern” landfills is underway (4 PPP, 3 with EU support, 4 in construction, the rest in preparation)

Implementation of the directive (2)

- Implementation process is driven by requirements of the National Waste Management Strategy
- Waste management requirements are being implemented through 24 regional systems



Implementation of the directive (3)

- Regional cooperation in waste management presents good opportunities for cost saving, but is related with institutional challenges
- Progress achieved during last several years is presented in the table below:

IMA				RWMP status			
	YES	NO	???	Adopted	Prepared	Revision	NO
Regions	19	4	1	6	8	2	8

IMA – inter-municipal agreements

RWMP – regional waste management plans



Size of the task Investment

- Sectoral waste management approximation strategy indicates, that capital expenditure for approximation in the field of municipal waste management can be estimated as € 616 Million
- It includes:
 - Capital expenditure for treatment and disposal € 238 Million
 - Capital expenditure for closure/aftercare € 143 Million
- Capital expenditure per inhabitant served is € 82,11



Size of the task

Operational and maintenance

- Total O&M expenditure for approximation in the field of municipal waste management can be estimated as € 144 Million
- The biggest part of O&M expenditure are collection costs, directly depending on costs for fuel and labour
- In term of operational and maintenance costs per inhabitant served, this is € 19.25 per inhabitant per annum



Transitional period

- Both investment and operational costs for implementation of waste management requirements are rather high
- They might be affordable only during long period, which would end after actual date of accession to the EU
- In such case Serbia during negotiations has to require transitional period for implementation of some articles of the directive
- Request for transitional period shall be accompanied with the Implementation plan (Directive Specific Implementation Plan) which has to justify the request



Directive Specific Implementation Plan (DSIP)

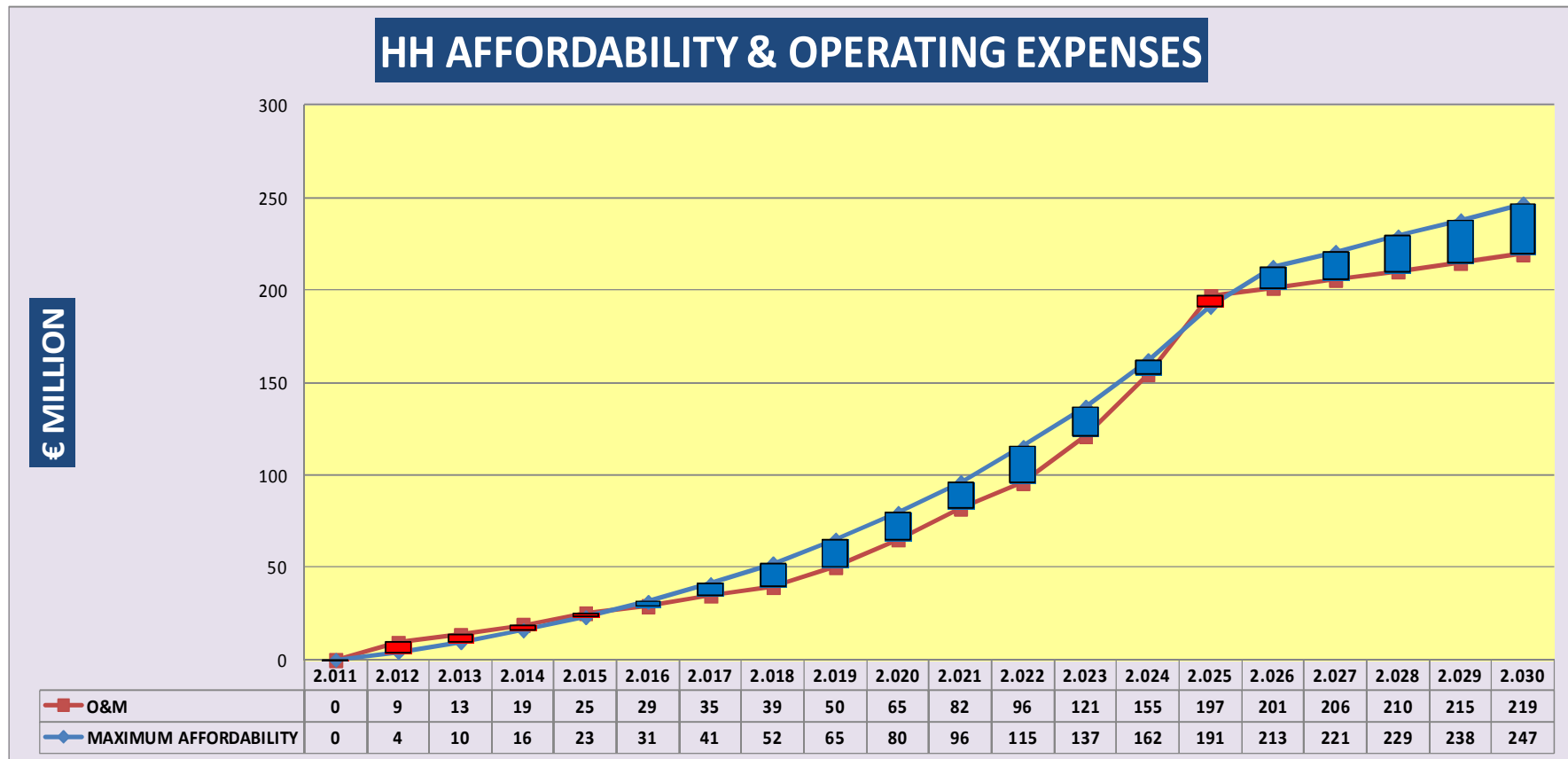
- In order to prepare for negotiations, the MoEMSP initiated development of DSIP, which would provide information on:
 - Current status with transposition and plans to fully transpose the directive
 - Administrative structures involved and plans to strengthen them
 - Status with existing infrastructure and plans for development of new infrastructure
 - Identified investment projects, their costs and implementation timetables
 - Mechanisms to finance needed investment and operational costs



Defining transitional period (1)

- Assumptions made:
 - Tariffs shall at least cover operational and maintenance costs
 - The affordability threshold for MSW services at 1% of Average Household Income
 - An annual tariff increase in real terms of 10% from 2012 throughout the implementation period
 - € 19.25 per inhabitant per annum unit costs used for operational and maintenance expenditure
- The methodology allows to link operational costs to compliance targets in terms of % population served by a fully compliant service

Affordability to assume operational costs



Percentage of population served

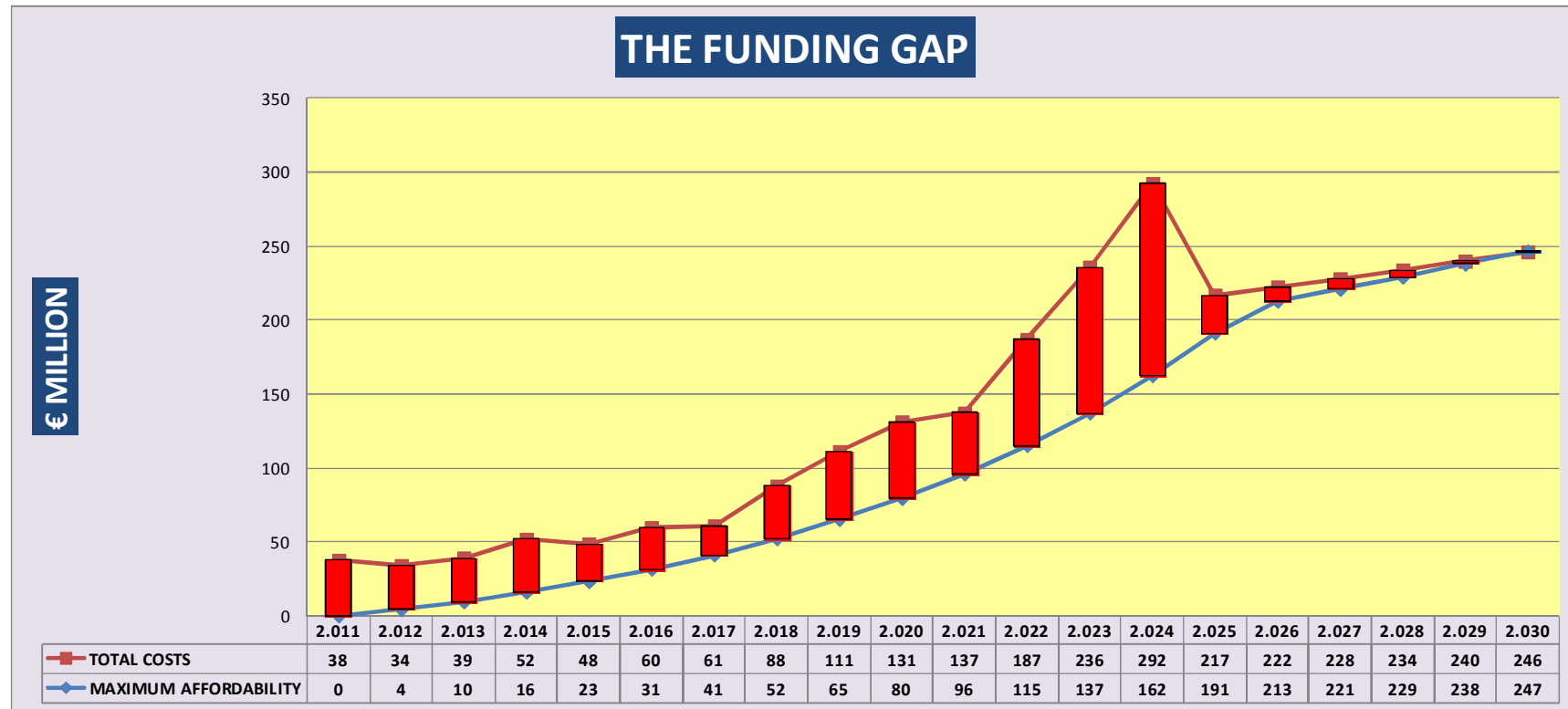
			SUMMARY OF COSTS OF COMPLIANCE TO 2025. (€ MILLION)														
			2.011	2.012	2.013	2.014	2.015	2.016	2.017	2.018	2.019	2.020	2.021	2.022	2.023	2.024	2.025
INVESTMENTS (CAPEX)			37,7	17,0	18,9	22,4	12,1	18,7	13,5	35,2	46,8	51,4	39,5	74,3	97,1	118,9	0,0
OPERATING EXPENSES (OPEX)			0,0	9,3	13,5	18,9	25,2	29,1	34,8	39,4	50,3	65,1	81,9	95,8	121,1	154,7	196,9
ADMINISTRATIVE COSTS (ADMIN)			0,0	7,7	6,7	10,5	11,1	11,8	12,5	13,2	14,0	14,8	15,7	16,7	17,7	18,7	19,9
TOTAL COSTS			37,7	34,0	39,1	51,8	48,5	59,5	60,7	87,8	111,1	131,3	137,1	186,7	235,8	292,3	216,7
COMPLIANCE TARGET			2.011	2.012	2.013	2.014	2.015	2.016	2.017	2.018	2.019	2.020	2.021	2.022	2.023	2.024	2.025
INHABITANTS SERVED			1.265.062	1.468.267	1.689.468	1.946.911	2.083.435	2.289.996	2.435.653	2.809.152	3.295.601	3.819.022	4.213.306	4.941.118	5.873.213	6.992.593	6.992.593
AS % POPULATION			16,87%	19,58%	22,53%	25,97%	27,79%	30,54%	32,48%	37,47%	43,95%	50,93%	56,19%	65,90%	78,33%	93,26%	93,26%



Defining transitional period (2)

- Earlier compliance than 2024 date would not be affordable in sense of covering operational costs from waste management tariffs
- The Transition period required for full compliance is 5 years based on an assumed membership date of 2019
- Even in this scenario funding gap exists to cover investment costs

Total cost and funding gap




- Local and international resources will be mobilised to finance investment related costs for implementation of this directive



Next steps developing DSIP

- From directive level to projects level
- DSIP will be based on regional systems
- Information to be provided for each regional systems on:
 - Description of existing infrastructure and measures to be taken (closing, upgrading to meet new requirements)
 - New infrastructure planned to implement the directive requirements (landfills, transfer stations, MBT, incineration plants, etc.)
 - Long list of needs combined into projects
 - Cost assessment (project by project)
- Time table for implementation of each system will be provided taking into consideration financing mechanism and criteria for priority setting



Thank you
for your attention!