

# Development of the waste treatment industry of the Saint Petersburg

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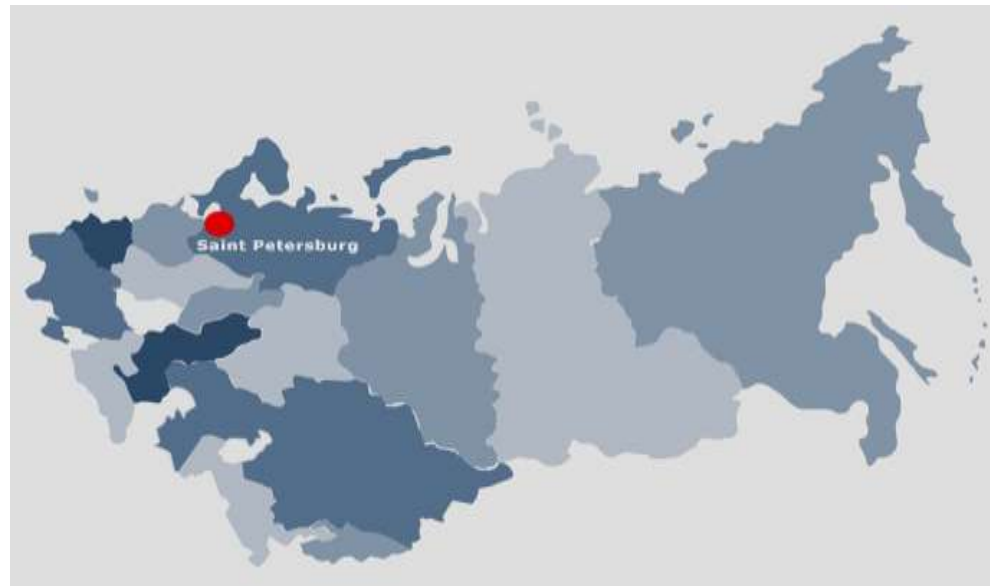


# Saint Petersburg



## Key Facts:

- Population – 4.88 million
- Area – 1,500 km<sup>2</sup>
- Area of industrial zones – 240 km<sup>2</sup>
- 2011 Gross Regional Product – US\$ 44.3 billion



## Saint Petersburg:

- Russia's second largest city, industrial, scientific & culture centre
- Supportive local authorities
- Strong FDI – Toyota, General Motors, Ford, Nokian Tyres
- Major tourist destination – “Venice of the North”



# Saint Petersburg: key projects



## «The Western High Speed Diameter road»

### Project description:

Whole length of the route: 46,6 km. Traffic capacity: up to 128 000 vehicle per day.

**Financing form:** PPP



## «Pulkovo Airport Development Project»

### Project description:

With new passenger terminal of the airport, development of adjacent infrastructure and complex airdrom modernization Pulkovo airport will become one of the leading modern air transport nodes in Northern Europe. Passenger traffic capacity: up to 17 million per year.

**Financing form:** PPP





# Waste treatment industry in figures



- Saint Petersburg generates about 10-11 million m<sup>3</sup> of MSW annually
- Waste treatment plants treat about 15% of total amount of waste
- The rest 85% are disposed of at the landfill
- Predicted amount of waste generated by the city is about 13,8 million m<sup>3</sup> (i.e. over 2 million tons)



# Existing infrastructure of the waste treatment industry

Mechanical-biological treatment is performed by the 2 plants, in the western and eastern parts of the city. Useful materials such as paper, plastic and metals are recovered first through the mechanical separation stage. The rest organic material goes through the composting stage. The end product is CLO (Compost-like output).

There are 3 landfill sites serve the city's needs.



# Waste collection system

Saint Petersburg area has 25 060 waste collection sites including:

- arranged collection sites (outside the buildings and structures) – 8 951
- collection sites with underground containers – 271
- collection systems (inside the buildings and structures) – 15 838





# Development of the industry: waste treatment plants



PPP project of the MSW treatment plant construction.  
Tender procedure took place in 2009-2010.

## Description:

- Investor – Helector S.A.–Aktor Concessions S.A.–Aktor S.A.
- Capacity 350 000 tons/annum of MSW
- Residual fraction of the plant not more than 25%
- Commissioning date – 2015

## Technologies:

Mechanical and Optical separation

Biological treatment – biodrying

Biomass power plant.



# PPP Projects: key characteristics



- 30 year «Design Build Finance Operate and Transfer» contract; upon the expiration of the PPP Agreement, the ownership title to the plant shall be transferred back to the City
- Investments return is planned through the waste processing fee and income from
- selling recycled materials / energy
- Saint Petersburg is to secure delivery to the plant of 350 thousand tones of solid household waste per year

Timeframe:

16.11.09 –  
tender announcement

08.04.10 –  
preliminary  
qualifications of  
applicants

20.01.11 –  
Selection of the  
successful bidder

16.05.11 –  
conclusion of the PPP  
Agreement





# Development of the industry: landfill sites



Modern landfilling complex designed to accept waste for both disposal and recycling purposes. Landfill capacity – 420 000 tons/annual. Commissioning date – 2014.

## Technologies:

Geomembrane, protecting groundwater and the underlying soil from leachate

Leachate collection and removal systems

Groundwater monitoring systems

Air quality monitoring system



# Future of the industry



The Regional Target Program for Waste Treatment has developed by the city authorities and approved by Decree of the Government of Saint Petersburg dd. 30 May 2012 No. 524 “Regional target program for municipal and industrial waste treatment in Saint Petersburg in 2012-2020” (hereinafter as Program). In the Program challenges of implementing modern technologies for MSW, hazardous and medical waste treatment are met. The key points are following:

- MSW treatment facilities construction
- Hazardous and medical treatment facilities construction
- Construction of modern landfills
- Improving of the waste collection system
- Establishing efficient monitoring system



# Future of the industry: new projects

In accordance with the approved Program 4 new MSW treatment plant and 2 modern landfiling complex are to be designed and built by 2020 to met the city needs.

Tenders for the right to conclude the agreement for design, construction and further operation of thenext 2 plants will start in 2013 on the basis of public private partnership.





*Thank You for Your attention*

