

# **WASTE-TO-ENERGY**

## **from the Polish perspective**

**Astana  
2017**

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Member of the Board  
Marguerite Fund

# ABOUT US

## MARGUERITE FUND

### MANDATE

- The Marguerite Fund is a EUR 710m long term equity fund targeting infrastructure investment in EU28.
- The Fund invests in **4 sectors: Telecom (ICT), Transport PPPs (TEN-T), Energy Infrastructure and Mature Renewable Energies (including Waste-to-Energy projects).**
- Advised by **independent Luxembourg-based company: Marguerite Adviser.**

### CORE SPONSORS



Bank Polski



European Commission



### OTHER INVESTORS

## **CASE STUDY**

# **POZNAŃ WASTE-TO-ENERGY PPP PROJECT**

# POZNAŃ WtE CASE STUDY

## MUNICIPAL WASTE MANAGEMENT IN POLAND

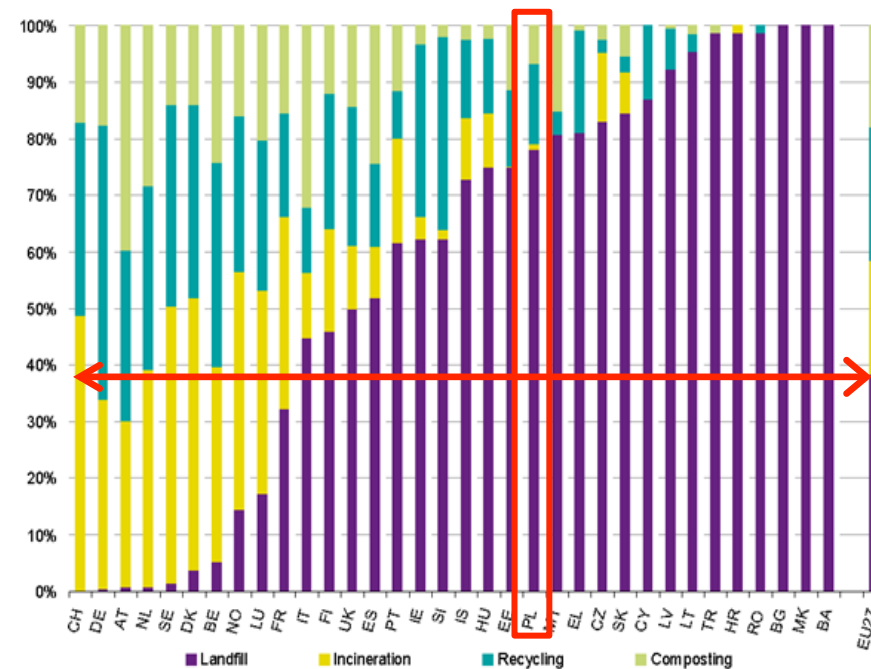
### MUNICIPAL WASTE MANAGEMENT IN POLAND

- ▶ Poland generates 10 million tons of Municipal Solid Waste ("MSW") per year. Almost 80% of it is landfilled.
- ▶ The 99/31/EC Directive on waste storage requires member states to limit the amount of biodegradable municipal waste directed to landfills.

### TARGETS FOR POLAND

1. Reduction of biowaste in landfills to 35% of the 1995's level by 2020;
2. Recycling targets for package waste, bulky waste, demolition waste;
3. Closing of non-compliant landfills. Reduction in number of landfills in operation from 1,321 in 2004 to 200 in 2014.

### MUNICIPAL WASTE TREATED IN 2009 BY COUNTRY AND TREATMENT CATEGORY



**WITH >75% OF MSW LANDFILLED POLAND DOES NOT COMPLY WITH THE EU WASTE RECYCLING TARGETS AND COULD POTENTIALLY FACE PENALTIES THE GOAL IS TO REACH THE 35% HURDLE IN 2020.**

# POZNAŃ WtE CASE STUDY

## PROJECT OVERVIEW

### GENERAL INFORMATION

- ▶ Sita Zielona Energia owns a 28.5 year DBOFM concession for a 210kt p.a. WtE in Poznań, Poland
  - Construction is on schedule and within budget; expected to be completed by end-2016
  - Total capex of PLN 905m
- ▶ Revenues are availability based with no volume risk
- ▶ The Fund holds a 50% interest in the project
  - The remaining 50% is owned by SITA Polska, a leading service provider in recycling and waste

### KEY OPERATING METRICS

<b>CAPACITY</b>	210 kt p.a.
<b>CAPEX</b>	PLN 905m
<b>CONSTRUCTION COMPLETION (EXPECTED)</b>	end 2016
<b>CONCESSION EXPIRY</b>	2041
<b>REMAINING CONCESSION LENGTH</b>	25 years (from construction completion)

### PROJECT LOCATION

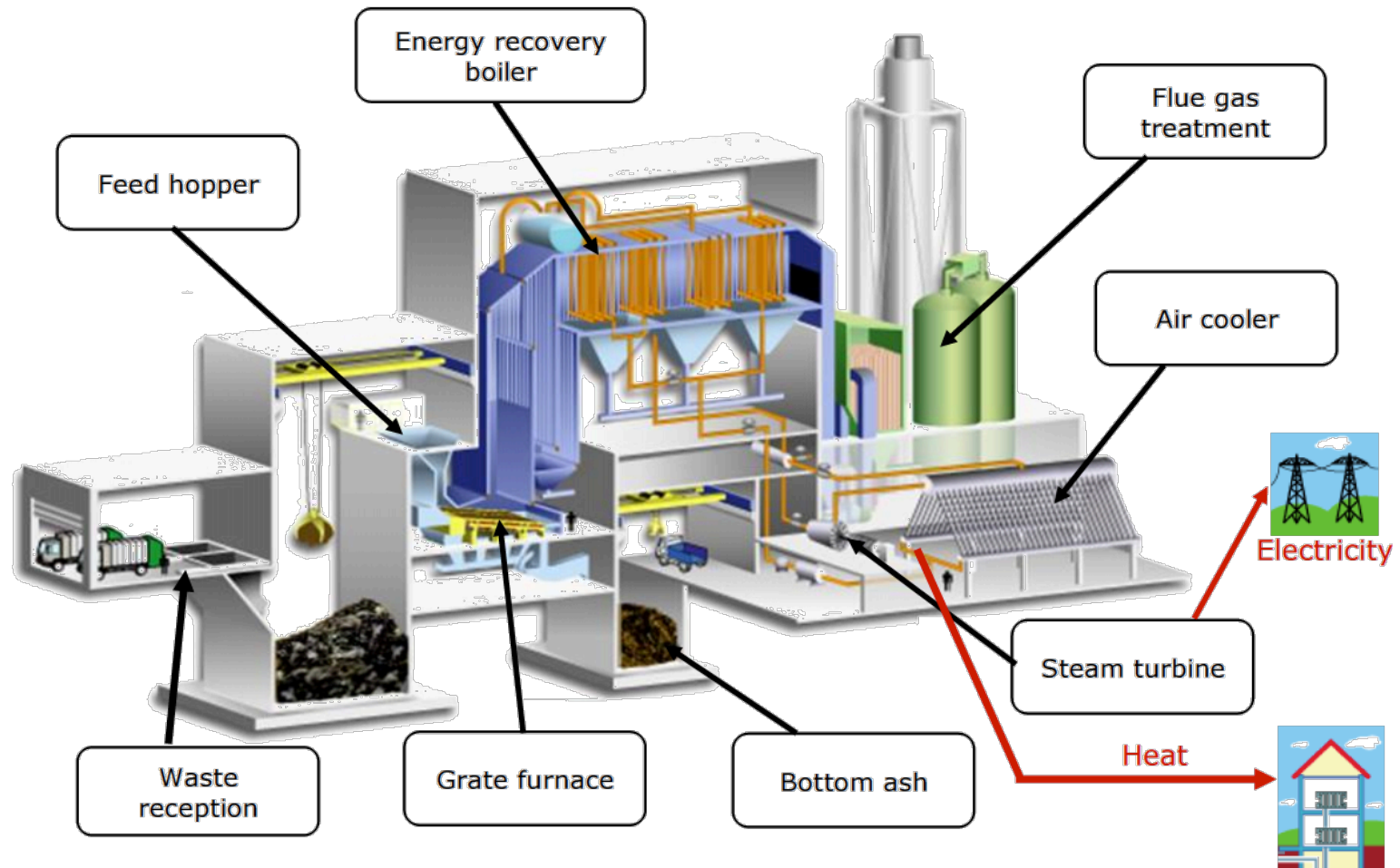


### PROJECT FINANCING

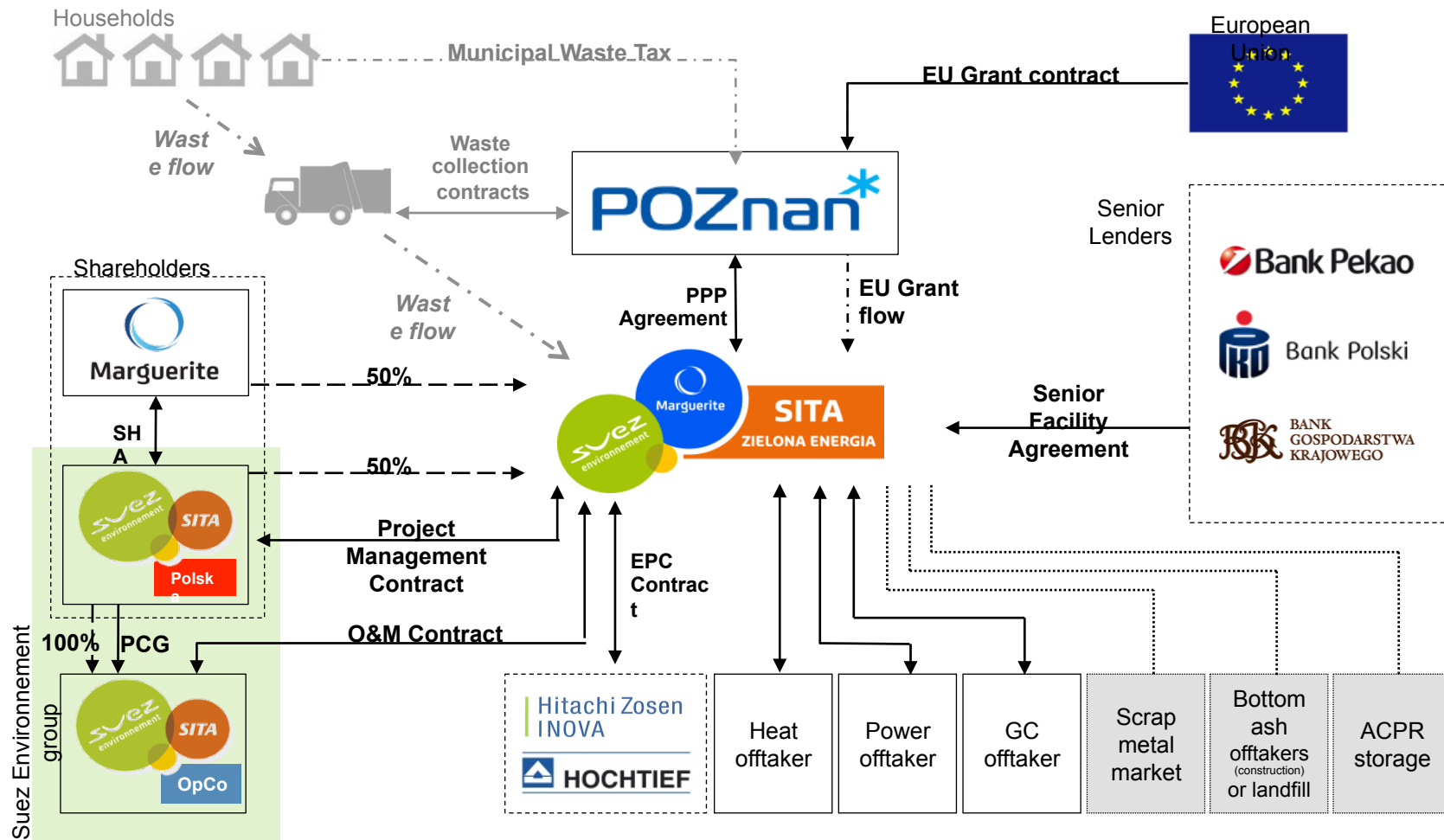
- ▶ **Financial Close:** April 2013
- ▶ **PLN 735m term loan** provided by **PKO BP, Peako SA and Bank Gospodarstwa Krajowego**
- ▶ **Debt-to-equity:** 80:20
- ▶ **Debt partially replaced by a EU subsidy** of PLN 330m.
- ▶ **Maturity:** 20 to 22 years from COD
- ▶ Benefitted from good **relationship between Marguerite and the Marguerite Fund's investor PKO BP**

# POZNAŃ WtE CASE STUDY

## PROJECT VISUALISATION



# POZNAŃ WtE CASE STUDY CONTRACTUAL STRUCTURE



# POZNAŃ WtE CASE STUDY

## RISK MATRIX

RISK	CITY	SPV
Update of EIA Report and building permit application		✓
Design documentation		✓
Construction delay and cost overruns		✓
Waste volume and calorific value risk	✓	
Waste throughput, heat and power output performance		✓
Heat, power and green certificates prices	✓	
Assumptions on recyclable metals and bottom ashes		✓
O&M costs overruns		✓
Financing (senior debt, subordinated debt, equity)		✓
EU Grant availability ( <i>cap</i> )	✓	✓
Exchange rate (EUR/PLN) variation between BAFO submission and start of construction	✓	
Interest rate variation between BAFO submission and hedging transaction entered at start of construction	✓	
Change in Law ( <i>cap</i> )	✓	✓
Force Majeure & Fait du Prince	✓	