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JESSICA implementation in Greece

Athens, 3 December 2015





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Mantzoufas Nikos
PPP Secretary
President of Jessica Investment Board
November 2015



JESSICA implementation in Greece

A total of **25 projects** making use of the financial engineering instrument JESSICA have been signed or are expected to be signed shortly in Greece, **totaling the amount of EUR 300mn**, using **EUR 115mn of JESSICA funds**.

These projects cover a wide variety of **sectors**:

urban transportation telematics system



schools infrastructure



business parks



enhancement of the historical and cultural heritage
of the country



biogas

waste projects



energy efficiency (street lighting)



Significant achievements:

1. We achieve a **leverage of times 2.7**
2. None of these projects would have been implemented without the utilization of JESSICA, especially due to the Greek Bank liquidity issues
3. Two of these projects, the school PPPs & the waste PPPs project **utilized for the first time in EU level** a combination of **EIB funds and funds of JESSICA**
4. Both these projects have been **awarded as the best projects of the year in education and in waste sectors**
5. The **Telematics System** for urban transportation PPP project achieved for the first time a combination of EU grant, JESSICA and Equity / Commercial banks

PROJECTS UNDER CONSTRUCTION

REGION	Project	Budget (EURm)	JESSICA allocation (EURm)
CRETE	Improvement of the local road no7 – section “PAGNI – Stavrakia intersection”	0.7	0.15
CRETE	Completion of the Public Car Park with the addition of 5 parking levels and regeneration of the development plot.	2.0	0.7
CRETE	Development of Biogas Plant.	3.1	1.1
ATTICA	Design, Construction, Financing and Facility Management of 14 school buildings in the region of Attica	58	19.1
ATTICA	Design, Construction, Financing and Facility Management of 10 schools buildings in the region of Attica	52	16.7
ATTICA	Design, financing, installation, operational support, maintenance and technical management of an Integrated Telematics System for information provision to users and fleet management of Road Transport SA (OSY SA) by PPP	18.9	4.0
IONIAN ISLANDS	Relocation of Corfu Intercity KTEL	2.3	1.4
C. MACEDONIA	Development of a Biomass-to-electricity power plant with a power output capacity of 1MW, in Krya Vrisi.	3.9	2.40
C. MACEDONIA	Development of a 1 MW Biogas project at Pentalofos	3.8	2.60
C. MACEDONIA	Development of a 1 MW Biogas project at Chalkidona	5.3	3.60
E. MACEDONIA & THRACE	Renovation of old Tobacco warehouse and development of a modern 5* hotel	15	1.90
EPIRUS	Implementation of Athletic Infrastructures (swimming pool) and Leisure facilities	1.5	1.1
W. MACEDONIA	Integrated Waste Management System. Design, Financing, Construction, Operation and Maintenance of Western Macedonia Integrated Waste Management System	49	13
	Total	216	68

Brief project description:	Design, financing, construction and management of 14 school units in various Municipalities of the Region of Attica through PPP. The schools will be managed under specific quality and performance standards by the Private Sector Partner for 25 years following their construction.
Project Promoter:	ATTICA SCHOOLS SA (shareholders: ATESE SA)
Contracting Authority:	Building Infrastructure SA (formerly School Buildings Organization SA)
Municipalities:	Athens, Peristeri, Ilion, Kropia, Penteli, Pallini – Gerakas, Keratsini - Drapetsona
Total Budget:	€ 57.987.287
Financing Parties	UDF Loan: € 19.100.000 Senior Loan (EIB): € 19.100.000 VAT Loan (Alpha Bank): € 9.700.000 Equity: € 10.087.287
Signing of Financing	4/2014
Start of Works	4/2014

Social and economic benefits of the Project

- The construction of the 14 schools will eliminate double shifts and allow students to be hosted in modern, safe and environmentally friendly classrooms managed under strict performance standards
- Large scale positive social impact
 - 7 Municipalities (population 1,1 million)
 - 3.750 students and their families
- Significant direct and long-term job creation
 - Construction period (2 years): 337 new jobs
 - Operation period (25 years): 83 new jobs
- Urban regeneration of the areas where the new school buildings will be constructed

Distinctions / innovative characteristics

- Received “Education deal of the Year 2014” award by World Finance Magazine
- First project at EU level where blending of JESSICA and EIB lending and private investment on a PPP project was implemented.
- First EU-wide JESSICA project that received state aid clearance due to its “Major Project” (budget over € 50 million) status



Brief project description:	Design, financing, construction and management of 10 school units in various Municipalities of the Region of Attica through PPP. The schools will be managed under specific quality and performance standards by the Private Sector Partner for 25 years following their construction.
Project Promoter:	JPA ATTICA SCHOOLS SA (shareholders: J&P AVAX SA)
Contracting Authority:	Building Infrastructure SA (formerly School Buildings Organization SA)
Municipalities:	Athens, Irakleio, Megara, Oropos
Total Budget:	€ 52.036.205
Financing Parties	UDF Loan: € 16.721.000 Senior Loan (EIB): € 16.721.000 VAT Loan (Alpha Bank): € 8.696.553 Equity: € 9.897.652
Signing of Financing	5/2014
Start of Works	5/2014

Social and economic benefits of the Project

- The construction of the 10 schools will eliminate double shifts and allow students to be hosted in modern, safe and environmentally friendly classrooms managed under strict performance standards
- Large scale positive social impact
 - 4 Municipalities (population 775.000)
 - 2.100 students and their families
- Significant direct and long-term job creation
 - Construction period (2 years): 294 new jobs
 - Operation period (25 years): 60 new jobs
- Urban regeneration of the areas where the new school buildings will be constructed

Distinctions / innovative characteristics

- Received “Education deal of the Year 2014” award by World Finance Magazine
- First project at EU level where blending of JESSICA and EIB lending and private investment on a PPP project was implemented



Brief project description:	The Project is intended to provide 1.000 “smart” bus and trolley tram stops within the greater Athens area, providing passengers with real time information about the schedules and destinations of 2.000 of its vehicles, in particular their expected time of arrival, delays, etc., as well as fleet management systems for OSY SA.
Project Promoter:	ADVANCED TRANSPORT TELEMATICS SA (shareholders: INTRASOFT SA, INTRAKAT SA)
Contracting Authority:	Road Transport SA (OSY SA)
Municipalities:	All metropolitan Athens
Total Budget:	€ 18.918.341
Financing Parties	UDF Loan: € 3.985.372 Senior Loan (NBG): € 2.729.989 VAT Loan (NBG): € 1.460.000 NSRF Grant: € 5.313.830 Equity: € 5.429.150
Signing of Financing	6/2014
Start of Works	7/2014

Social and economic benefits of the Project

- Pivotal upgrading of public transport infrastructure via the provision of vital information services to passengers
- Significant facilitation of urban transportation and improvement of passenger experience and quality of life (4,5 million inhabitants)
- Increased usage of public transport, with direct impact on traffic reduction, fuel consumption and air pollution reduction
- Significant direct and long-term job creation
 - Construction period (2 years): 115 new jobs
 - Operation period (25 years): 40 new jobs

Innovative characteristics

- First ICT project at EU level where blending of EU grants, JESSICA loan and private investment has been achieved



Brief project description:	Relocation of the operations of Corfu Intercity KTEL (Joint Bus Receipts Fund) from downtown Corfu Town to new, modern facilities on a land plot of a total area of approximately 10.000 m2 owned by KTEL close to Corfu Airport. The new facilities include the bus terminal, a two-storey building hosting ticket offices, retail stores and KTEL headquarters, and an auxiliary building for bus operations / maintenance.
Project Promoter:	Corfu Intercity KTEL (shareholders: several bus owners)
Municipality:	Corfu
Total Budget:	€ 2.310.000
Financing Parties	UDF Loan: € 1.386.000 Senior Loan (Piraeus Bank): € 396.000 Equity: € 528.000
Signing of Financing	5/2015
Start of Works	6/2015

Social and economic benefits of the Project

- De-congestion of the Corfu Town downtown area by allowing intercity buses to avoid the congested part of the town
- Reduction of air pollution and noise in the city center
- Facilitation of inter-urban transportation of both residents and visitors/tourists, as the new station will be in close proximity to Corfu Airport and several major roads to other parts of the island
- Improvement of the quality of life of the residents, visitors and commuters of Corfu Town resulting from the above interventions
- Significant direct and long-term job creation
 - Construction period (6 months): 28 new jobs
 - Operation period (ongoing): 15 new jobs



Brief description of the project

The project is a **key element of the Regional Waste Management Planning (PESDA) of Western Macedonia Region** and involves the **design, financing, construction, maintenance and operation of infrastructure for the Integrated Waste Management System (IWMS)**, for the region of Western Macedonia.

The IWMS units consist of:

- ❖ waste treatment plant with a capacity of 120 thousand tons per year
- ❖ waste landfill and
- ❖ 10 waste transfer stations 9 of which already exist



Imprinting plot, ACE construction and landfill

Project Snapshot

Project Promoter	EPADYM S.A. (Union of Aktor Concessions SA - HELECTOR SA)		
Project Implementation area	Region of Western Macedonia		
Total Budget	€ 42.394.601	Signing of JESSICA Financing Agreement	16.06.2015
JESSICA participation	€ 12.718.504	Start of Works date	16.06.2015
Current JESSICA disbursement	€8.632.211 (68%)	% of works completed	15%
Expected date of full JESSICA disbursement	March 2016	Expected date of project completion	March 2017

Qualitative and Quantitative Features / benefits

With the operation of IWMS units, the following targets will be achieved :

- ✓ environmental protection and public health,
 - ✓ saving of natural resources
 - ✓ contribution to achieving the objectives of the national and European legal framework,
 - ✓ employment growth in the region and
 - ✓ maximizing the utilization of materials contained in waste
- ❖ During the implementation of the project (2 years for the construction) **200 new jobs** will be created, while during the operation of the unit, **150 permanent positions** will be created over 25 years time. **Additional jobs** will also be created through the development of parallel activities such as the marketing of recyclable materials, trading of secondary products etc .
 - ❖ The project achieves a **high recovery rate of recyclable materials (35%)** and very **high rate of diversion of biodegradable waste (80%)**
 - ❖ **Direct financial benefit for the citizens of the Western Macedonia** region, since through JESSICA favorable financing, the Annual Fee (gate fee) has decreased from **€ 89,10 to € 84,69 per tone of waste.**
 - ❖ **Full compliance for the Region of Western Macedonia** with the requirements of the Greek legislation and European Directives concerning the management of Urban Waste Composite

«Design, Financing, Construction, Maintenance and Operation of the Infrastructures of the Integrated Solid Waste Management System in the Region of Western Macedonia through a PPP »

Awarding Authority: DIADYMA S.A.

Signed on **June 10, 2015** the Western Macedonia waste management project through PPP

It is the first project of integrated waste management in Greece

Main characteristics of the Project :

- **Technology:** Mechanical sorting/operation and composting

- Construction of new Waste Transfer Stations, new Landfill and Mechanical Biological Treatment Plant

- **Approved Environmental Terms**

- **It will create:**

>**200 new employment positions** during the construction period (**2 years**)

>**150 new employment positions** during the operational period (**25 years**)

Additional employment positions will be created from parallel to the Project activities

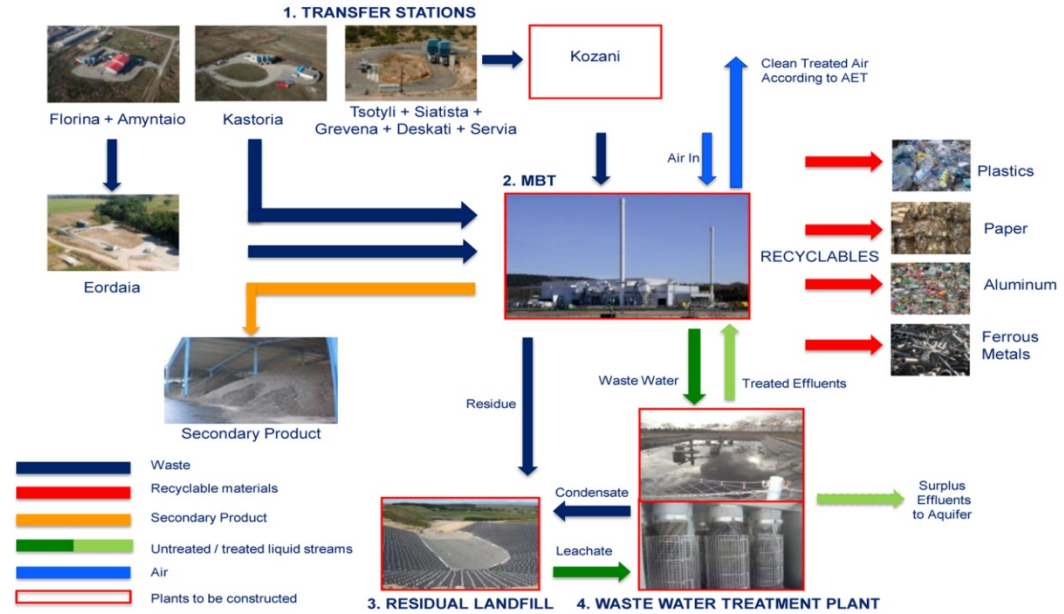
- The Project is financed also by the **European Investment Bank**

The Project includes **the construction, financing, operation and security** of the following:



The project announced as "Waste Deal of the Year"

- In a recent report by **European Commission**, the Project is referenced as the most positive example in the waste sector in Greece succeeding strict environmental terms **while applying EU funding with the most efficient way**



Mechanical & Biological Treatment Plant



Operation of the 9 existing Waste Transfer Stations



Landfill



Kozani Waste Transfer Station

Significant environmental results :

Diversion of biodegradable fraction of waste from landfilling > 80%
Recovery of recyclable products > 35%*

*In parallel with sorting at source high recovery rates are achieved

Project Financing:

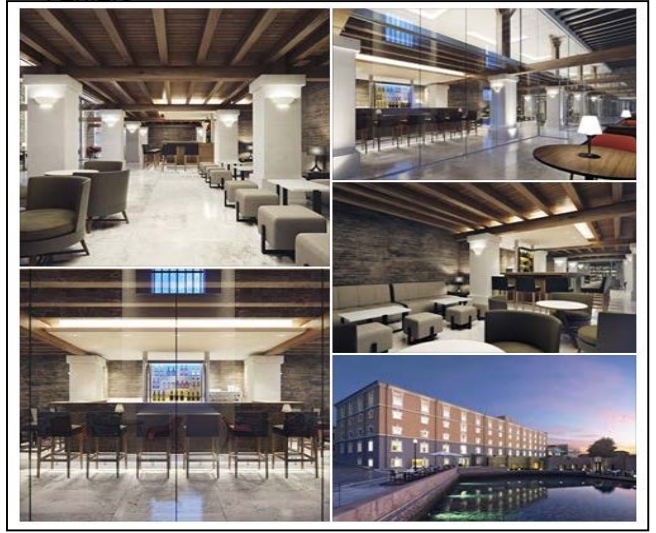
Total Project cost: € 49 million

- € 17 million Sponsors' equity
- € 13 million loan from EIB
- € 13 million loan from JESSICA UDF Fund
- € 6 million loan from National Bank of Greece
- Substantial leverage (x 3.8)



Brief description of the project

- ❖ The project involves the **renovation and restoration of an old tobacco warehouse which will be converted to a luxury five star (5 *) classic (AA) with a capacity of 144 beds or 72 rooms**
- ❖ The facade of the building was renovated without any change while internal skeleton and floors were carefully maintained and preserved
- ❖ The hotel has facilities for sports, relaxation and treatments (SPA - Fitness Center), multipurpose events and tobacco museum aiming at highlighting the history of the building and promoting to an extent the whole area, restaurants and shopping centers



Hotel unit after conversion

Project Snapshot

Project Promoter	Private Investor (ERGOEPISKEVES SA)		
Project Implementation area	Municipality of Drama		
Total Budget	€ 15.073.500	Signing of JESSICA Financing Agreement	31.07.2014
JESSICA participation	€ 1.901.933	Start of Works date	2012
Current JESSICA disbursement	€1.500.000 (79%)	% of works completed	85%
Expected date of full JESSICA disbursement	December 2015	Expected date of project completion	December 2015

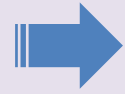
Qualitative and Quantitative Features / benefits

- ❖ **The project combines financing through the JESSICA initiative and the Development Law (worth €8.026.083) while the funding through JESSICA is provided on commercial terms**
- ❖ **The project through the renovation of an old preserved building – an old tobacco warehouse, to a five star hotel, which will be the first in Drama, aims to become a high quality attraction site in the center of the city.**

Before renovation



After renovation

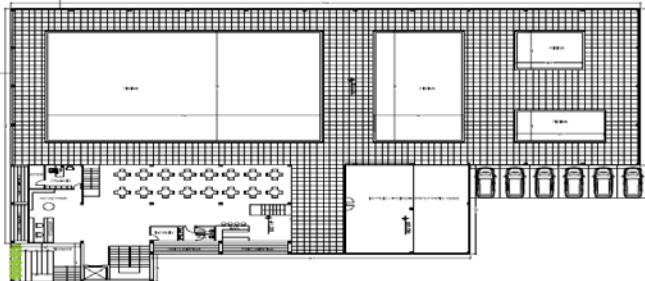


The project through the full restoration of the building is aiming at :

- ✓ **upgrading the urban environment** of the area of intervention
- ✓ **improving the image of the city center of Drama** and the **promoting its historical heritage**
- ✓ supporting the development of entrepreneurship, **creating added value for the region through the creation of new jobs**. It is estimated that during the construction the total wages will **exceed 5,000** while the hotel will create **25 permanent jobs** and several **seasonal positions**

Brief description of the project

- ❖ The project involves the **creation of an integrated multipurpose recreational - sports center which will provide high-quality services** (group and individual, such as wellness, sports and health)
- ❖ The operation of the center is aiming at families and all age groups from infancy to old age
- ❖ The services to be provided at the center are: swimming lessons in young children and adults, free swimming, therapeutic swimming, aqua relaxation services aerobic, baby swimming lessons, open sports and entertainment facilities



Project Snapshot

Project Promoter	Private Investor (Drakou- Pappas & Co)		
Project Implementation area	Municipality of Ioannina		
Total Budget	€ 1.500.000	Signing of JESSICA Financing Agreement	28.05.2015
JESSICA participation	€ 1.050.000	Start of Works date	28.05.2015
Current JESSICA disbursement	-	% of works completed	10%
Expected date of full JESSICA disbursement	31.03.2016	Expected date of project completion	31.03.2016

Qualitative and Quantitative Features / benefits

- ❖ The project seeks to cover the complete lack of services in the area by **combining sport and recreation with wellness and health**, as it is implemented in a region that is rapidly growing, thus creating a new urban space
- ❖ It is estimated that the project will :
 - ✓ contribute to the **upgrading of the Municipality of Ioannina 's** infrastructure making it particularly attractive for such leisure and athletic activities
 - ✓ contribute to **the development of entrepreneurship, creating added value** for the whole region of Epirus
 - ✓ **boost employment** by creating new jobs during the construction period and during its operation
- ❖ In particular during the construction period it is estimated that the required daily wages **will exceed 3,000** while during the operation of the project at least **15 permanent jobs** will be created

Project Summary

Project Promoter	Pella Biogas S.A. / Big Solar S.A.
Final Beneficiary - type of entity	Private company
Brief Description	Development of a Biomass- biogas to-electricity power plant with a power output capacity of 1MWe, in Krya Vrasi, Municipality of Pella
Signature Date	06.03.2014
Date of Construction Start	January 2015

Project Financial Plan

	Amount	Total Amount (%)	Disbursed Amount (%)
JESSICA Funding	€ 2.400.000	62,18%	88,59%
Equity	€ 710.000	18,39%	100,00%
Piraeus Bank Co-Financing	€ 750.000	19,43%	100,00%
Eligible Budget	€ 3.860.000	100,00%	92,90%
Equity	€ 790.000	88,76%	60,57%
Piraeus Bank Co-Financing	€ 100.000	11,24%	100,00%
Non Eligible Budget	€ 890.000	100,00%	65,00%

Brief Description

The project pertains to the development of a biomass to biogas to electricity production plant in the Municipality of Pella (Krya Vrasi location), with a power output capacity of 0,95MWe and the development of biogas plant in Farm Akrolimni Municipality Pella Pella Regional Unity in a privately owned plot of 23.722 sq.m. within the General Urban Plan of the (former) Municipality of Krya Vrasi. The unit will receive organic waste from nearby units in order to use anaerobic digestion technology to produce biogas. This biogas will then be forwarded to a CHP engine to produce electricity.

Biogas projects are projects of prime importance on the protection of the health of residents and the environment and solve the organic waste problem discharged today uncontrollably into the environment. The implementation of this project will have multiple benefits in the wider region and will contribute to efficient and environmentally friendly waste processing, the utilization of alternative energy sources to strengthen the energy potential, but also to create new workplaces for the local population.



Project Summary

Project Promoter	Bioenergy North S.A.
Final Beneficiary - type of entity	Private company
Brief Description	Development of a Biomass - biogas to-electricity power plant with a power output capacity of 1MWe, Municipality of Oreokastro
Signature Date	22.12.2014
Date of Construction Start	March 2015

Project Financial Plan

	Amount	Total Amount (%)	Disbursed Amount (%)
JESSICA Funding	€ 2.600.000	68,91%	90,38%
Equity	€ 793.000	21,02%	100,00%
Piraeus Bank Co-Financing	€ 380.000	10,07%	100,00%
Eligible Budget	€ 3.773.000	100,00%	93,37%
Equity	€ 160.000	25,40%	14,54%
Piraeus Bank Co-Financing	€ 470.000	74,60%	28,64%
Non Eligible Budget	€ 630.000	100,00%	26,09%

Brief Description

The project pertains to the development of a biomass to biogas to electricity production plant in the Municipality of Oreokastro (Aridina location), with a power output capacity of 0,999MWe and the development of biogas plant in a privately owned plot of 31.310 sq.m. The unit will receive organic waste from nearby units in order to use anaerobic digestion technology to produce biogas. This biogas will then be forwarded to a CHP engine to produce electricity.

Biogas projects are projects of prime importance on the protection of the health of residents and the environment and solve the organic waste problem discharged today uncontrollably into the environment. The implementation of this project will have multiple benefits in the wider region and will contribute to efficient and environmentally friendly waste processing, the utilization of alternative energy sources to strengthen the energy potential, but also to create new workplaces for the local population.



Project Summary

Project Promoter	Delta Axiou Energy S.A.
Final Beneficiary - type of entity	Private company
Brief Description	Development of a Biomass- biogas to-electricity power plant with a power output capacity of 1MWe, Municipality of Chalkidona
Signature Date	22.12.2014
Date of Construction Start	February 2015

Project Financial Plan

	Amount	Total Amount (%)	Disbursed Amount (%)
JESSICA Funding	€ 3.600.000	68,28%	14,76%
Equity	€ 1.072.500	20,34%	100,00%
Piraeus Bank Co-Financing	€ 600.000	11,38%	100,00%
Eligible Budget	€5.272.500	100,00%	41,80%
Equity	€ 557.500	84,79%	0,00%
Piraeus Bank Co-Financing	€ 100.000	15,21%	100,00%
Non Eligible Budget	€ 657.500	100,00%	15,21%

Brief Description

The project pertains to the development of a biomass to biogas to electricity production plant in the Municipality of Chalkidona (Adendro location), with a power output capacity of 1MWe and the development of biogas plant in a privately owned plot of 21.250 sq.m. The unit will receive organic waste from nearby units in order to use anaerobic digestion technology to produce biogas. This biogas will then be forwarded to a CHP engine to produce electricity.

Biogas projects are projects of prime importance on the protection of the health of residents and the environment and solve the organic waste problem discharged today uncontrollably into the environment. The implementation of this project will have multiple benefits in the wider region and will contribute to efficient and environmentally friendly waste processing, the utilization of alternative energy sources to strengthen the energy potential, but also to create new workplaces for the local population.



Project Title: Completion of the Public Car Park with the addition of 5 parking levels and regeneration of the development plot.

Promoter: KYDON MUNICIPAL S.A.

Project Description:

Construction of a car parking with total capacity 330 parking spaces, in the centre of the city of Chania.

Qualitative Characteristics:

- Reduced traffic congestion and parking problems.
- Indirect environment benefit from reduced traffic pollution.
- Amelioration of the organization of the City and of the quality of life for citizens and tourists of Chania.
- Increase of employment.
- Promotion of antiquities.

Quantitative Characteristics:

- Revenue increase for the Municipality of Chania.
- Low financial cost
- Increase of productivity

City: Chania

Project Status: Under Construction (85%)

Date of Signing the financing (or expected): 13/9/2013

Date of Start of Works (or expected): Jan/2014

Budget: €2.007.910,00

JESSICA: €650.000,00

Co- financing: €785.000,00



Project Title: Development of Biogas Plant with nominal generating capacity of 510 Kwe

Promoter: Construction Bio-energy Crete L.P.

City: Industrial area of Heraklion

Project Status: Under construction (8%)

Date of Signing the financing (or expected): 23/12/2014

Date of Start of Works (or expected): Jan/2015

Project Description:

It is a private project with main scope the development of Biogas Plant with nominal generating capacity 510KWe. Biogas plant will use 99,73 t/day of organic waste mixture (animal byproducts, creamery, goat manure). The electricity will be sold to the “Hellenic Electricity Distribution Network Operator S.A.” and the majority of the generated heat energy will be sold to enterprises located in the Industrial Park of Heraklion.

Qualitative Characteristics:

- Distribution and sale of electricity to the network and to local businesses.
- Utilizing of heat energy and supply to businesses operating in the industrial area.
- Production of fertilizer.
- Benefit for the local society due to the use of renewable energy sources and saving.
- Environmental protection due to the energy and sources saving and efficient management of sewage.
- Raise of employment.

Quantitative Characteristics:

- Raised revenues from the sale of fertilizer and the heat power.
- Relatively secure financial scheme.

Budget: €3.068.000,00

JESSICA: €1.100.000,00

Co - financing: €1.200.100,00



Project Title: Improvement of the local road no7 – section “PAGNI – Stavrakia intersection”, Construction of auxiliary streets and a new roundabout.

Promoter: DELTA Crete S.A.

City: Heraklion

Project Status: Completed (100%)

Date of Signing the financing (or expected): 13/9/2013

Date of Start of Works (or expected): Jan/2013

Date of Project Completion: Oct/2013

Project Description:

The project improve access to infrastructure and urban services (University Hospital of Heraklion).

Qualitative Characteristics:

- Reduce traffic congestion and the parking problems in the area.
- Servicing visitors of University Hospital of Heraklion.
- Increase of employment.

Quantitative Characteristics:

- Low financial cost.
- Increase revenues for the Promoter.

Budget: €670.000,00

JESSICA: €150.000,00

Co - financing: €450.000,00





Thank you

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