








Part A - Project summary

A.1 Project Identification

Acronym	OWEIS		
Title	ORGANIC WASTE as ENERGY INTEGRATION SYSTEM		
Project Number	UIA01-154		
(Main) Urban Authority	Municipality of Rho		
ERDF rate	80.00 %		
Project Duration	Start Date	01/11/2016	
	End Date	01/11/2019	
	Total Months	36	
Topic	3. Energy transition		

A.2 Project summary

Description	<p>The world's population is set to rise to almost 10 billion people by 2050 and 80% of them will live in small spaces (UN).The EU imports more than half of all the energy that it consumes.The total import bill is more than €1 billion per day (EU).The EU moved engaging first of all the municipalities through the "Covenant of Mayors for Climate and Energy",with the aim of reducing CO2 and greenhouse gases by 20% by 2020 and at least of 80% by 2050.EU created the "2020 Strategy" with the aim to reduce its greenhouse gas emission by at least 20%,to increase the share of renewable energy to at least 20% of consumption,increasing of 20% the energy efficiency.Analyzing these data,OWEIS wants to turn into a resource the human activity and the wastes of the population of cities. It will be possible following two actions:the first will be a redevelopment action and energy optimization of civil buildings.The second one will enhance workforce anthropic using two small units operated at the neighborhood level,implementing the instructions provided in the Directives 2009/72/EC and following.OWEIS integrates the activities of the Covenant of Mayors in which Rho is committed with the district heating solutions,the installation of photovoltaic panels and the project to replace street lighting with modern LED allowing the town to reach before the goals in environmental projects without replace with efforts under way at national and local level in view of the European strategy for the environment</p>
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Partner		ERDF co-financing		Contribution			Total	
Partner	Country	EUR	ERDF rate	Public	Private	Total	Budget	% of project budget
PP 1	 IT	2,276,800.00	80.00 %	569,200.00	0.00	569,200.00	2,846,000.00	45.54 %
PP 2	 IT	349,320.00	80.00 %	0.00	87,330.00	87,330.00	436,650.00	6.99 %
PP 3	 IT	159,800.00	80.00 %	39,640.00	0.00	39,640.00	199,750.00	3.20 %
PP 4	 IT	161,200.00	80.00 %	40,300.00	0.00	40,300.00	201,500.00	3.22 %
PP 5	 IT	160,896.88	80.00 %	40,224.22	0.00	40,224.22	201,121.10	3.22 %
PP 6	 IT	146,000.00	80.00 %	36,500.00	0.00	36,500.00	182,500.00	2.92 %
PP 7	 IT	1,745,740.00	80.00 %	0.00	436,435.00	436,435.00	2,182,175.00	34.92 %
Total (€)		4,999,756.88	80.00 %	725,864.22	523,765.00	1,249,629.22	6,249,696.10	100.00 %

Part B - Partnership

B.1 - (Main) Urban Authority

Organisation name (Original)	Comune di Rho				
Organisation name (English)	Municipality of Rho				
Member state	ITALY				
Number of inhabitants	50,496				
Comments, if necessary	http://ec.europa.eu/eurostat/web/nuts/local-administrative-units Correspondence table LAU 2 – NUTS 2013, EU-28				
Department(s)/unit(s)/division(s) concerned	Mayor Pietro Romano, Office of City council member Mr Forloni (main proxy: Ecology, public green and urban furniture), Office of Energy and Office of Planning, Management Area, Protection Land and Public Works: Mr Zappa, Mr Buzzoni; Mr Lombardi; Mr Negrelli. the two offices have supported the development of the project with private partners and have shown the most suitable areas, socially and economically, for the project. They also have given data of historical projects on energy topics				
Address	Street	Marsala street, n. 19	Contact Person	Position	Responsible
	Post Code	20017		Title	Mr
	Town	Rho		Forename	Angelo
	NUTS 2	Lombardia		Surname	Lombardi
	NUTS 3	Milano		Email Address	angelo.lombardi@comune.rho.mi.it
				Phone Number	+39 293 332 472
Legal representative	Position	Mayor			
	Title	Mr			
	Forename	Pietro			
	Surname	Romano			
	Email Address	segreteria.sindaco@comune.rho.mi.it			
	Phone Number	+39 293 332 230			
Legal status of the organisation	Public	Partner type	Local public authority		
VAT number	00893240150				
VAT recoverable	Yes				
Staff costs claimed on the basis of	Real costs				
Competences and experiences in relation to the challenge addressed?	Offices of Energy and Planning are the most qualified on legal and operational competencies for energy and green topics, as as witnessed by SEAP. The two office have supported from 2011 the measures of SEAP actions both from a technical criteria that from the communication. The two offices have always collaborated in recent years with the municipal utilities interested to the "Green" topics, also creating a training and communication for students and citizens.				
Experience in participating in and/or managing EU co-financed projects or other international projects.	Currently, the offices support the Covenant of Mayors for Climate & Energy where the municipality of Rho signed the SEAP (Sustainable Energy Action Plans) on 29th november, 2012. The shares are communication and training in schools, the creation of photovoltaic panels and building redevelopment				

Total Partner Budget

PROGRAMME CO-FINANCING		CONTRIBUTION			Total (€)
ERDF (€)	ERDF Co-financing rate (%)	Public Contribution (€)	Private Contribution (€)	Total Contribution (€)	Total Eligible Cost (€)
(a)		(b)	(c)	(d)=(b)+(c)	(e)=(a)+(d)
2,276,800.00	80.00 %	569,200.00	0.00	569,200.00	2,846,000.00

Source(s) of Contribution

Name of Organisation/ Source of Contribution	Legal Status	% of Total Partner Contribution	Amount (€)	Cash or In-kind Contribution	Comment
the costs will be supported by by municipal companies NET and ASER	Public	100.00	569,200.00	cash	Rho will benefit of the project with the support of municipal companies
Total (€)		100.00	569,200.00		Contribution Target 569,200.00

Breakdown of Partner Budget per Work Package/ Budget Line

Work Package	Staff Costs (€)	Office and administration (€)	Travel and accommodation (€)	External expertise and services (€)	Equipment (€)	Infrastructure and Works (€)	Sub-total (€)	Revenues (€)	Total (€)
WP 1	0.00	0.00	0.00	20,000.00	0.00	0.00	0.00	0.00	20,000.00
WP 2	210,000.00	31,500.00	10,000.00	0.00	0.00	0.00	251,500.00	0.00	251,500.00
WP 3	50,000.00	7,500.00	6,000.00	80,000.00	0.00	0.00	143,500.00	0.00	143,500.00
WP 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 5	10,000.00	1,500.00	0.00	90,000.00	0.00	0.00	101,500.00	0.00	101,500.00
WP 6	30,000.00	4,500.00	0.00	180,000.00	0.00	2,100,000.00	2,314,500.00	0.00	2,314,500.00
WP 7	0.00	0.00	0.00	15,000.00	0.00	0.00	0.00	0.00	15,000.00
Total (€)	300,000.00	45,000.00	16,000.00	385,000.00	0.00	2,100,000.00	2,846,000.00	0.00	2,846,000.00
% of total budget	10.54 %	1.58 %	0.56 %	13.53 %	0.00 %	73.79 %	100.00 %	0.00 %	100.00 %

B.3 - Delivery Partner (Partner 2)

Organisation name (Original)	SES Enser Engineering srl				
Organisation name (English)	SES Enser Engineering srl				
Member state	ITALY				
Department(s)/unit(s)/division(s) concerned	Mr Giovanni Mario Bardoni: CEO involved in meeting with stakeholders and partners to give operational support to the creation of an anaerobic digester to liquid technology SES Enser Staff involved in this phase: Mr Jafarynia Nima: Technical Director/R&D Mr Massimo Fabris: Commercial Manager Mr Ivano Cesareo, external consultant. He's supported the management of project meeting and the creation of the proposal				
Address	Street	Fabio Filzi Street, n. 33	Contact Person	Position	CEO
	Post Code	20100		Title	Mr
	Town	Milano		Forename	Giovanni Mario
	NUTS 2	Lombardia		Surname	Bardoni
	NUTS 3	Milano		Email Address	gmb@ses-enser.com
				Phone Number	+39 266 507 091
Legal representative	Position	CEO			
	Title	Mr			
	Forename	Giovanni Mario			
	Surname	Bardoni			
	Email Address	gmb@ses-enser.com			
	Phone Number	+39 266 507 091			
Legal status of the organisation	Private	Partner type	SME		
VAT number	07415240964				
VAT recoverable	Yes				
Staff costs claimed on the basis of	20 % flat rate				
Involvement in the design phase	Design and prototyping of anaerobic digestion plants from 1 to 100 kW				
Involvement in the implementation phase	Engineering and construction of electrical, electro-mechanical and electronic systems for control of combustible / flammable and toxic gas, preventing and fighting fires; integrating systems to protect people and investments against fire, air pollution, explosions and contamination of air, water and soil. Installation, supervision and commissioning of security and automation systems.				
Competences and experiences in relation to the challenge addressed?	The Company supplies its commodities and services to a wide range of users/industries: Oil & Gas Field, Gas/Oil Pipeline, Oil & Gas terminals, Petroleum: Onshore, Petroleum: Offshore Platforms & FPSO, Chemical and Petrochemical plants, Power generation plants, Power Stations & Substations, Buildings, Food & Pharmaceutical, Heating & Ventilation, Iron/Steel, Pulp & Paper, Public Utilities				
Experience in participating in and/or managing EU co-financed projects or other international projects.	A large number of International projects have been completed: Mediterranean Area and Middle East (Egypt, Turkey, Algeria, UAE, Qatar, Saudi A., Iran, Kuwait etc), Far East (China, Vietnam, Malaysia, Thailand etc), Africa (Nigeria, Congo, Sudan, South Africa etc), Central Asia (Russia, Kazakhstan, Ukraine etc), America (Canada, Mexico, Venezuela, Brazil, Colombia).Is included in the Vendor List of the major international Companies, both EPC contractors and End Users				

Total Partner Budget

PROGRAMME CO-FINANCING		CONTRIBUTION			Total (€)
ERDF (€)	ERDF Co-financing rate (%)	Public Contribution (€)	Private Contribution (€)	Total Contribution (€)	Total Eligible Cost (€)
(a)		(b)	(c)	(d)=(b)+(c)	(e)=(a)+(d)
349,320.00	80.00 %	0.00	87,330.00	87,330.00	436,650.00

Source(s) of Contribution

Name of Organisation/ Source of Contribution	Legal Status	% of Total Partner Contribution	Amount (€)	Cash or In-kind Contribution	Comment
SES Enser Engineering srl	Private	100.00	87,330.00	cash	The last accounts of Ses Enser amounted to 1.1 million euro. SES ENSER IS PART OF GRUPO SES (SES ENSER, SES ASA and IMX) which has a total turnover of almost 7 million euro
Total (€)		100.00	87,330.00		Contribution Target 87,330.00

Breakdown of Partner Budget per Work Package/ Budget Line

Work Package	Staff Costs (€)	Office and administration (€)	Travel and accommodation (€)	External expertise and services (€)	Equipment (€)	Infrastructure and Works (€)	Sub-total (€)	Revenues (€)	Total (€)
WP 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 2	4,000.00	600.00	0.00	20,000.00	0.00	0.00	24,600.00	0.00	24,600.00
WP 3	7,000.00	1,050.00	0.00	35,000.00	0.00	0.00	43,050.00	0.00	43,050.00
WP 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 6	60,000.00	9,000.00	0.00	0.00	0.00	300,000.00	369,000.00	0.00	369,000.00
WP 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (€)	71,000.00	10,650.00	0.00	55,000.00	0.00	300,000.00	436,650.00	0.00	436,650.00
% of total budget	16.26 %	2.44 %	0.00 %	12.60 %	0.00 %	68.70 %	100.00 %	0.00 %	100.00 %

B.3 - Delivery Partner (Partner 3)

Organisation name (Original)	ASER - Azienda Servizi del Rhodense SpA				
Organisation name (English)	Environmental and Integrated Services of Rho				
Member state	ITALY				
Department(s)/unit(s)/division(s) concerned	Waste management; technical and legal support to the waste management and digestate. Responsibles Alessandra Conte, Office Technical Responsible, Mauro Lacroce, Office of Legal Affairs, Tommaso Di Paolo, Technical Manager, were involved in meetings to support their specific topics and to get information guidance on the project criticality, as the future waste logistic and the legal support for digestate and outputs				
Address	Street	via Madonna 63	Contact Person	Position	Responsible of Technical Office
	Post Code	20017		Title	Ms
	Town	Rho		Forename	Alessandra
	NUTS 2	Lombardia		Surname	Conte
	NUTS 3	Milano		Email Address	conte@aserspa.net
				Phone Number	+39 335 291 755
Legal representative	Position	President			
	Title	Mr			
	Forename	Massimo			
	Surname	Orlandi			
	Email Address	orlandi@aserspa.net			
	Phone Number	+39	293 332 572		
Legal status of the organisation	Public	Partner type	Local public authority		
VAT number	04626760963				
VAT recoverable	Yes				
Staff costs claimed on the basis of	Real costs				
Involvement in the design phase	Meetings with the City of Rho and other delivery partners to manage information about the provision of public waste disposal services, legislation, resource optimization and cost for the performance of waste management services				
Involvement in the implementation phase	Technical and legal support on the management of organic waste and the output produced by the digesters; active involvement in the waste collection and management of organic phase to be introduced in the digester; anaerobic digesters management in operational phase				
Competences and experiences in relation to the challenge addressed?	The company deals with all activities related to the management and execution of urban hygiene, integrated environmental services including refuse collection activities, collecting and transporting urban and other waste, technical and operational activities and administrative connected and related to the provision of services. It also deals with the design, construction and management of infrastructures to the delivery of specified services				
Experience in participating in and/or managing EU co-financed projects or other international projects.	ASER is a municipal company indirectly involved in environmental projects of the municipality. Currently, Rho had not been developed European projects on the theme of ASER				

Total Partner Budget

PROGRAMME CO-FINANCING		CONTRIBUTION			Total (€)
ERDF (€)	ERDF Co-financing rate (%)	Public Contribution (€)	Private Contribution (€)	Total Contribution (€)	Total Eligible Cost (€)
(a)		(b)	(c)	(d)=(b)+(c)	(e)=(a)+(d)
158,560.00	80.00 %	39,640.00	0.00	39,640.00	198,200.00

Source(s) of Contribution

Name of Organisation/ Source of Contribution	Legal Status	% of Total Partner Contribution	Amount (€)	Cash or In-kind Contribution	Comment
ASER Cash	Public	100.00	39,640.00	cash	ASER is a municipal companies. It's budget was 9 million euro in 2014
Total (€)		100.00	39,640.00		Contribution Target 39,950.00

Breakdown of Partner Budget per Work Package/ Budget Line

Work Package	Staff Costs (€)	Office and administration (€)	Travel and accommodation (€)	External expertise and services (€)	Equipment (€)	Infrastructure and Works (€)	Sub-total (€)	Revenues (€)	Total (€)
WP 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 2	37,000.00	5,550.00	0.00	0.00	0.00	0.00	42,550.00	0.00	42,550.00
WP 3	23,000.00	3,450.00	5,000.00	0.00	0.00	0.00	31,450.00	0.00	31,450.00
WP 4	105,000.00	15,750.00	5,000.00	0.00	0.00	0.00	125,750.00	0.00	125,750.00
WP 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (€)	165,000.00	24,750.00	10,000.00	0.00	0.00	0.00	199,750.00	0.00	199,750.00
% of total budget	82.60 %	12.39 %	5.01 %	0.00 %	0.00 %	0.00 %	100.00 %	0.00 %	100.00 %

B.3 - Delivery Partner (Partner 4)

Organisation name (Original)	AGRINNOVA - Università degli Studi Torino				
Organisation name (English)	AGRINNOVA Centre of Competence for the Innovation in the agro-environmental sector				
Member state	ITALY				
Department(s)/unit(s)/division(s) concerned	AGRINNOVA - Centre of Competence for the Innovation in the agro-environmental sector of the University of Torino: Mr Ivano Ramon (research contract); Mr Guido Martano (laboratory technician) Mr Massimo Pugliese (researcher) Mr Pugliese has managed internal and "partners" meetings to support chemical research project giving information on activities to be developed. Internal meetings have served to better manage project tasks that Agrinnova will develop.				
Address	Street	<input type="text" value="largo Paolo Braccini 2"/>	Contact Person	Position	<input type="text" value="Assistant Professor in Plant Pathology at University of Torino - DISAFA"/>
	Post Code	<input type="text" value="10095"/>		Title	<input type="text" value="Mr"/>
	Town	<input type="text" value="Grugliasco"/>		Forename	<input type="text" value="Massimo"/>
	NUTS 2	<input type="text" value="Piemonte"/>		Surname	<input type="text" value="Pugliese"/>
	NUTS 3	<input type="text" value="Torino"/>		Email Address	<input type="text" value="massimo.pugliese@unito.it"/>
				Phone Number	<input type="text" value="+39"/> <input type="text" value="3 665 878 594"/>
Legal representative	Position	<input type="text" value="Rettore"/>			
	Title	<input type="text" value="Mr"/>			
	Forename	<input type="text" value="Gianmaia"/>			
	Surname	<input type="text" value="Ajani"/>			
	Email Address	<input type="text" value="rettore@unito.it"/>			
	Phone Number	<input type="text" value="+39"/>	<input type="text" value="116 702 201"/>		
Legal status of the organisation	<input type="text" value="Public"/>	Partner type	<input type="text" value="National public authority"/>		
VAT number	<input type="text" value="02099550010"/>				
VAT recoverable	<input type="text" value="Yes"/>				
Staff costs claimed on the basis of	<input type="text" value="Real costs"/>				
Involvement in the design phase	<input type="text" value="Meetings and meetings with the City of Rho and other Partners (and Stakeholders) in order to develop sustainable development strategies for the enhancement of the relationship between the city, use of organic waste and agriculture"/>				
Involvement in the implementation phase	<input type="text" value="Controls on the digestate quality, to re-use the output for urban farming: the security in terms of potential contaminants, heavy metals and human pathogens; to reuse for urban and professional agriculture, as fertilizer and substrate. Agrinnova will take into account, as well as aeroponics and hydroponics systems (very interesting but also difficult to manage), of soilless systems with substrate (digestate)"/>				
Competences and experiences in relation to the challenge addressed?	<input advanced="" agriculture="" and="" as="" bio-char="" by="" chemicals="" common="" complete="" compost="" compost,="" creation="" current="" efficient="" emissions;="" fertilisers="" for="" improve="" in="" mineral="" nutrients="" objectives="" of="" organic="" processes,="" production="" products:="" quality"="" recovery="" recycling="" reducing="" refertil"="" standardized="" systems="" the="" to="" treated="" treatment="" type="text" use="" used="" value="Agrinnova has operated with the research project " waste="" zero=""/>				
Experience in participating in and/or managing EU co-financed projects or other international projects.	<input type="text" value="Plant and food biosecurity (PLANTFOODSEC-NoE), VII PQ, Security Improvement of comprehensive bio-waste transformation and nutrient recovery treatment processes for production of combined natural products (REFERTIL), VII PQ, KBBE-2011-5 Biogreenhouse –m Towards a sustainable and productiveEU organic greenhouse COST ACTION FA 1105 Effective Management of Pests and Harmful Alien Species – Integrated Solutions – (EMPHASIS) EU-CHINA Level for IPM demonstration (EUCLID)"/>				

Total Partner Budget

PROGRAMME CO-FINANCING		CONTRIBUTION			Total (€)
ERDF (€)	ERDF Co-financing rate (%)	Public Contribution (€)	Private Contribution (€)	Total Contribution (€)	Total Eligible Cost (€)
(a)		(b)	(c)	(d)=(b)+(c)	(e)=(a)+(d)
<input type="text" value="161,200.00"/>	<input type="text" value="80.00 %"/>	<input type="text" value="40,300.00"/>	<input type="text" value="0.00"/>	<input type="text" value="40,300.00"/>	<input type="text" value="201,500.00"/>

Source(s) of Contribution

Name of Organisation/ Source of Contribution	Legal Status	% of Total Partner Contribution	Amount (€)	Cash or In-kind Contribution	Comment
Agrinnova	Public	100.00	40,300.00	cash	Agrinnova is a research center supported by the University of turin
Total (€)		100.00	40,300.00		Contribution Target 40,300.00

Breakdown of Partner Budget per Work Package/ Budget Line

Work Package	Staff Costs (€)	Office and administration (€)	Travel and accommodation (€)	External expertise and services (€)	Equipment (€)	Infrastructure and Works (€)	Sub-total (€)	Revenues (€)	Total (€)
WP 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 2	10,000.00	1,500.00	0.00	0.00	0.00	0.00	11,500.00	0.00	11,500.00
WP 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 4	160,000.00	24,000.00	6,000.00	0.00	0.00	0.00	190,000.00	0.00	190,000.00
WP 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (€)	170,000.00	25,500.00	6,000.00	0.00	0.00	0.00	201,500.00	0.00	201,500.00
% of total budget	84.37 %	12.66 %	2.98 %	0.00 %	0.00 %	0.00 %	100.00 %	0.00 %	100.00 %

B.3 - Delivery Partner (Partner 5)

Organisation name (Original)	Università degli Studi di Milano – Bicocca				
Organisation name (English)	University of Milan - Bicocca				
Member state	ITALY				
Department(s)/unit(s)/division(s) concerned	Department of Computer Systems and Communication Researcher Stefano Pinardi. He was involved in the general project meetings. It gave the contribution to the idea of developing a section in support of citizens to make more palatable the environmental project				
Address	Street	Italy	Contact Person	Position	Professor
	Post Code	20126		Title	Mr
	Town	Milano		Forename	Riccardo
	NUTS 2	Lombardia		Surname	Melen
	NUTS 3	Milano		Email Address	riccardo.melen@unimib.it
			Phone Number	+39	264 487 830
Legal representative	Position	Rector			
	Title	Ms			
	Forename	Cristina			
	Surname	Messa			
	Email Address	cristina.messa@unimib.it			
Phone Number	+39	264 488 267			
Legal status of the organisation	Public	Partner type	National public authority		
VAT number	12621570154				
VAT recoverable	Yes				
Staff costs claimed on the basis of	Real costs				
Involvement in the design phase	Meeting with the town of Rho, Partners and stakeholders in order to point out the interventions of indoor situation assessment; situation assesment outdoor; falls; ergonomics of gentle interaction for the elderly; ergonomics of interaction with disabilities also social psychological / conigitive. These aspects also allow lower insurance costs for older people who make sure to catastrophic events (stroke, fall) at home				
Involvement in the implementation phase	Services to the person at home and in the city, particularly to vulnerable people. This aspect requires the use of sensors for the situation assesment of the person, the indoor positioning tag, and a bracelet for the movement, for the communication of data using an indoor broadband allocated in property renovation (will fit with the plans and a wifi router centralizing condominium): the appropriately protected data privacy will go to the cloud or on a hybrid server for processing.				
Competences and experiences in relation to the challenge addressed?	Architectures and software analysis, distributed systems, imaging and computer vision, robotics; Databases and information systems, artificial intelligence, engineering and knowledge management, technology cooperation; Bioinformatics, complex systems, formal models of distributed systems; Information, finance, environment, computational networks, decision sciences; Development of integrated systems of solution modeling and analysis of optimization problems in optical ASP				
Experience in participating in and/or managing EU co-financed projects or other international projects.	Network architectures dedicated to the provision of interactive multimedia services to residential users. Middleware platforms able to integrate traditional elaborative mechanisms and software agents, with the purpose of controlling distributed applications of multimedia type. Security issues, authentication and personal identification in wireless networks.				

Total Partner Budget

PROGRAMME CO-FINANCING		CONTRIBUTION			Total (€)
ERDF (€)	ERDF Co-financing rate (%)	Public Contribution (€)	Private Contribution (€)	Total Contribution (€)	Total Eligible Cost (€)
(a)		(b)	(c)	(d)=(b)+(c)	(e)=(a)+(d)
160,896.88	80.00 %	40,224.22	0.00	40,224.22	201,121.10

Source(s) of Contribution

Name of Organisation/ Source of Contribution	Legal Status	% of Total Partner Contribution	Amount (€)	Cash or In-kind Contribution	Comment
Bicocca University	Public	100.00	40,224.22	cash	Bicocca has over 300 million of revenue in 2015
Total (€)		100.00	40,224.22		Contribution Target 40,224.22

Breakdown of Partner Budget per Work Package/ Budget Line

Work Package	Staff Costs (€)	Office and administration (€)	Travel and accommodation (€)	External expertise and services (€)	Equipment (€)	Infrastructure and Works (€)	Sub-total (€)	Revenues (€)	Total (€)
WP 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 2	19,500.00	2,925.00	0.00	0.00	0.00	0.00	22,425.00	0.00	22,425.00
WP 3	34,000.00	5,100.00	7,000.00	0.00	0.00	0.00	46,100.00	0.00	46,100.00
WP 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 5	90,014.00	13,502.10	10,000.00	10,080.00	9,000.00	0.00	132,596.10	0.00	132,596.10
WP 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (€)	143,514.00	21,527.10	17,000.00	10,080.00	9,000.00	0.00	201,121.10	0.00	201,121.10
% of total budget	71.36 %	10.70 %	8.45 %	5.01 %	4.47 %	0.00 %	100.00 %	0.00 %	100.00 %

B.3 - Delivery Partner (Partner 6)

Organisation name (Original)	Dipartimento di Design - Politecnico di Milano				
Organisation name (English)	Polytechnic of Milan				
Member state	ITALY				
Department(s)/unit(s)/division(s) concerned	Design School - Design Department. Marinella Ferrara Associated Professor, Coordinator of Research Center of Material Design Culture Giulio Ceppi, Researcher They were involved to handle the design of the buildings and to optimize future online communications				
Address	Street	via Durando 38A	Contact Person	Position	Assistant professor
	Post Code	20158		Title	Mr
	Town	Milano		Forename	Giulio
	NUTS 2	Lombardia		Surname	Ceppi
	NUTS 3	Milano		Email Address	giulio.ceppi@polimi.it
				Phone Number	+39 223 995 837
Legal representative	Position	Rector			
	Title	Mr			
	Forename	Giovanni			
	Surname	Azzone			
	Email Address	giovanni.azzone@polimi.it			
	Phone Number	+39	223 992 250		
Legal status of the organisation	Public	Partner type	National public authority		
VAT number	04376620151				
VAT recoverable	Yes				
Staff costs claimed on the basis of	Real costs				
Involvement in the design phase	Meetings with the City of Rho and the Partners on the topics: - the active involvement of residents and local authorities for the implementation of communication campaigns for the dissemination of the project; - management of investment design activities				
Involvement in the implementation phase	The Department of Design participates in the project with communication design skills, products, spaces and service-design, on the topic: the design and implementation of a process of participation and co-design and social responsibility that aims to engage local residents, users of the system, local authorities and other stakeholders; anaerobic digester project, its impact and related areas; campaigns and tools to support the project communication				
Competences and experiences in relation to the challenge addressed?	The Polytechnic of Milan is an active member of several international networks for the promotion of design, including: DESIS - Design for Social Innovation towards Sustainability LENS - The Learning Network on Sustainability MEdes - Master of European Design CUMULUS ICSID - The International Council of Societies of Industrial Design				
Experience in participating in and/or managing EU co-financed projects or other international projects.	Service Design for Innovation; the Learning Network for Sustainable energy systems; Pegaso - Fit for future; DiDIY Digital Do It Yourself; CREA Summer; TANGO (Towards A New interGenerational Openness) project Academy; SustainabilityMaker				

Total Partner Budget

PROGRAMME CO-FINANCING		CONTRIBUTION			Total (€)
ERDF (€)	ERDF Co-financing rate (%)	Public Contribution (€)	Private Contribution (€)	Total Contribution (€)	Total Eligible Cost (€)
(a)		(b)	(c)	(d)=(b)+(c)	(e)=(a)+(d)
146,000.00	80.00 %	36,500.00	0.00	36,500.00	182,500.00

Source(s) of Contribution

Name of Organisation/ Source of Contribution	Legal Status	% of Total Partner Contribution	Amount (€)	Cash or In-kind Contribution	Comment
Politecnico di Milano	Public	100.00	36,500.00	cash	"Politecnico di Milano" is one of the most advanced universities in supporting projects with a budget of 400 million euro
Total (€)		100.00	36,500.00		Contribution Target 36,500.00

Breakdown of Partner Budget per Work Package/ Budget Line

Work Package	Staff Costs (€)	Office and administration (€)	Travel and accommodation (€)	External expertise and services (€)	Equipment (€)	Infrastructure and Works (€)	Sub-total (€)	Revenues (€)	Total (€)
WP 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 2	20,000.00	3,000.00	0.00	0.00	0.00	0.00	23,000.00	0.00	23,000.00
WP 3	70,000.00	10,500.00	10,000.00	0.00	0.00	0.00	90,500.00	0.00	90,500.00
WP 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 6	60,000.00	9,000.00	0.00	0.00	0.00	0.00	69,000.00	0.00	69,000.00
WP 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (€)	150,000.00	22,500.00	10,000.00	0.00	0.00	0.00	182,500.00	0.00	182,500.00
% of total budget	82.19 %	12.33 %	5.48 %	0.00 %	0.00 %	0.00 %	100.00 %	0.00 %	100.00 %

B.3 - Delivery Partner (Partner 7)

Organisation name (Original)	SES ASA ENGINEERING srl				
Organisation name (English)	SES ASA ENGINEERING srl				
Member state	ITALY				
Department(s)/unit(s)/division(s) concerned	CEO Giovanni Mario Bardoni has supported the design of the structures related to energy conservation, building redevelopment and safety of buildings and people. Technical office: Mr Andrea Facchietti Marketing Manager: Ms Sabrina Bardoni. She's supported by controlling costs of activities External Consultant: Ms Rita Ferro. She's supported the management of project meeting and the creation of the proposal; Mr Vito Lavanga, expert Digesters and Building redevelopment				
Address	Street	via Galileo Galilei 5	Contact Person	Position	CEO
	Post Code	20091		Title	Mr
	Town	Bresso		Forename	Giovanni Mario
	NUTS 2	Lombardia		Surname	Bardoni
	NUTS 3	Milano		Email Address	gmb@ses-enser.com
				Phone Number	+39 3 291 339 542
Legal representative	Position	Presidente CdA			
	Title	Mr			
	Forename	Silvio			
	Surname	Clerici			
	Email Address	sesasa.it@ses-enser.com			
	Phone Number	+39 266 507 091			
Legal status of the organisation	Private	Partner type	SME		
VAT number	08082380158				
VAT recoverable	Yes				
Staff costs claimed on the basis of	Real costs				
Involvement in the design phase	Meetings with the City of Rho, Partners and stakeholders on the topic of the design of the structures related to energy conservation, building redevelopment and safety of buildings and people. SES ASA has supported this stage with input from experts who have handled the relations between partners and have given the technical and scientific information to the project				
Involvement in the implementation phase	Design and production of systems and equipment for pollution control, control of industrial processes using industrial computers and local controllers and distributed; construction, transformation, assembly and industrial maintenance; construction, modification, repair and assembly of light and heavy carpentry as well as products and fire protection systems; technical and industrial assistance				
Competences and experiences in relation to the challenge addressed?	It manufactures advanced systems for home automation, Engineering and multifunctional measures, energy saving innovating control of low-cost combustion, Innovation in measurements and their networks through wireless, early fire detection, early detection of flammable gases and toxic confined. It will handle the internationalization and dissemination of technologies promoted in the project. PP7 has a clear international vocation recognized also in the biogas world-class meeting				
Experience in participating in and/or managing EU co-financed projects or other international projects.	SES ASA has worked in recent years on international macro projects also related to Biogas with contracts worth more than EUR 7 million, mainly for the design and supply all systems of detection, control and signaling				

Total Partner Budget

PROGRAMME CO-FINANCING		CONTRIBUTION			Total (€)
ERDF (€)	ERDF Co-financing rate (%)	Public Contribution (€)	Private Contribution (€)	Total Contribution (€)	Total Eligible Cost (€)
(a)		(b)	(c)	(d)=(b)+(c)	(e)=(a)+(d)
1,745,740.00	80.00 %	0.00	436,435.00	436,435.00	2,182,175.00

Source(s) of Contribution

Name of Organisation/ Source of Contribution	Legal Status	% of Total Partner Contribution	Amount (€)	Cash or In-kind Contribution	Comment
SES ASA	Private	100.00	436,435.00	cash	The last accounts of SES ASA amounted to 4.5 million euro. Next balance will benefit of LNG work for over € 7 million. Let's see also LNG Summit of Cannes, march 2016.
Total (€)		100.00	436,435.00		Contribution Target 436,435.00

Breakdown of Partner Budget per Work Package/ Budget Line

Work Package	Staff Costs (€)	Office and administration (€)	Travel and accommodation (€)	External expertise and services (€)	Equipment (€)	Infrastructure and Works (€)	Sub-total (€)	Revenues (€)	Total (€)
WP 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 2	20,000.00	3,000.00	0.00	80,000.00	0.00	0.00	103,000.00	0.00	103,000.00
WP 3	20,000.00	3,000.00	12,000.00	80,000.00	0.00	0.00	115,000.00	0.00	115,000.00
WP 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP 6	464,500.00	69,675.00	0.00	150,000.00	50,000.00	1,230,000.00	1,964,175.00	0.00	1,964,175.00
WP 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (€)	504,500.00	75,675.00	12,000.00	310,000.00	50,000.00	1,230,000.00	2,182,175.00	0.00	2,182,175.00
% of total budget	23.12 %	3.47 %	0.55 %	14.21 %	2.29 %	56.37 %	100.00 %	0.00 %	100.00 %

Part C - Project description

C.1 Project relevance and innovativeness

C.1.1 Main challenge(s) to be addressed

Main challenge(s) to be addressed

OWEIS aims to make a decisive contribution in the challenge on the "Energy Transition" starting from the assumption of the call that "How cities grow and operate has a huge impact on energy demand as they account for 60 to 80% of global energy consumption and around the same share of CO2 emissions". This idea is common in all the Green projects including those of the Smart Cities [eg. Concerto, EUGUGLE, S(m2)ART] and the Covenant of Mayors that Rho has joined since 2011. Through SEAP - SEAP ADDENDUM analysis of Rho, it's possible to see how the main problem is related to the emissions from electricity use for work (51%) and the use of fuels and electricity for domestic needs (about 30%). Analyzing the intervention areas of the SEAP, it will have in 2011 a total of emissions of 140,000 tons, of which the 39% is due to the heating of fuels and 18% for electricity used for domestic purposes. OWEIS will be based on two actions: the first, MICRO, with a digester based on liquid technology and an innovative energy upgrading technology that will also develop energy from new "absorber" walls. The second, MINI, with a digester based on solid technology for companies. Thanks to these actions it will have an energy saving and of emissions by more than 70%, reducing with the MICRO system about 2969,64 tons of CO2 using 110 families as prosumers for energy/CO2. The MINI system will reduce the CO2 emissions of about 3602,92 tons using the green waste of Rho and the waste of an Ho.Re.Ca company. OWEIS will reduce 6572,56 tons of CO2 for year, giving a good contribution to 36000 tons of SEAP actions of Rho before the 2020. The action on condominiums, in particular the "poppy roof", allows the generation of other energy, the creation of new spaces and social cultures in addition to reducing the use of water through the recovery and recycling of rainwater for non-potable uses. These measures fall into social point near the methodology gentle care, supported by partners 5 University Bicocca

C.1.2 Proposed solution

Proposed solution

OWEIS will build two innovative anaerobic digesters to support the condominium users and "business". The first digester will be a MICRO system, with liquid technology. The second will be a MINI system with solid technology. The first is part of a plan to upgrade and energy optimization of the casings and shells of the buildings, to optimize fuel consumption and reduce the waste of energy and water, in line with Directive 2002/91/EC. MICRO will support 110 families with a digester of 10kW, useful to 500IE. MINI system will have a power of 100kW, useful to 5000IE. Thanks to new patented technologies, the systems will be even smaller than the EU means by Directive 2009/72/EC, respecting the principle "Think Small First". Energy efficiency and the use of waste as energy allows to reduce not only the CO2 produced in the city, but also the energy to be imported to satisfy the needs of the neighborhood, at a minimum order of 70% of the 2016 consumption. The MICRO system will save the 90% of currently used energy, reducing the CO2 that will be produced, thanks to the thermal absorber coat/plaster for condos and the "poppy roof". The first is a coat for wall with the following abilities: Insulation, Hygroscopicity, Energy Uptake, Acoustic Insulation. The second is an inverted parabolic roof that allows the electrical recovery, heat and water. The roof will be innovative for environment field but in OWEIS it will create also recreational spaces for social interests of the project. The output of the digesters will be the input of the research of three universities, which offer contradictory and monitoring emissions (air and ground), the liquid fertilizer extracted from the digester and their potential direct reuse (or treatments) in the strengthening of soils and fighting desertification. The difference between traditional compost and OWEIS output will be that the digestate output of OWEIS will be immediately usable thanks to academic research on the use of selected patents

C.1.3 Innovativeness of the proposed solution

Innovativeness of the proposed solution

Rho deals with the reduction of CO2 emissions and the use of fossil fuels through several lines of action such as: - The construction redevelopment along with Expo 2015 (June-October 2015) with the installation of photovoltaic panels; - The replacement of the municipal lights with modern LED; - With Resolution of the Council of 21/07/2011, Rho has joined the project "Covenant of Mayors for Climate and Energy" and its SEAP (Sustainable Energy Action Plans - the Council Resolution of 29/11/2012) with "the completion of the district heating network and the massive installation of photovoltaic panels in addition everything you can do in terms of energy savings". These actions fall under the "2020 Energy Strategy" with a highly innovative look not only for the removal of CO2, but also for the social side, clearly visible in the educational project 'Sentinelle di Luce' developed with local schools: the project aims to disclose the SEAP activity and make the children more aware about issues such as energy saving, the respect of natural resources and the environment in general. At the end of 2015 the project has actively involved 44 classes. The OWEIS solution aims to make use of the latest technology for two actions: A) enhance the organic waste, solid and liquid, in order to reduce the use of fossil fuels and electricity purchased, by producing on-site; B) rehabilitate and optimize the buildings, avoiding long-term energy waste, with specific stratigraphy on the wrappers (even to capture energy), with vaulted roofs to introduce social and functional space to saving primary resources like water and energy (electricity and heat) as well as agricultural production on site. In Europe there are currently only projects related to energy optimization, as previously reported and visible from the Covenant of Mayors website, or projects to "0 Waste" to avoid waste. At present there are in fact only large systems that allow for example in Östersund, Sweden, to produce biogas from sludge from sewage treatment plants to power municipal and private vehicles. Evidence of this is also given by CEWEP and EurObserv'ER. There are a few digesters with similar "solid technology" in Switzerland used by breeders associations (source BioEcoGeo), in non-urban areas, as it promises OWEIS. OWEIS aims to integrate SEAP actions to engrave with the two pilot systems, on two major sources of CO2: electricity and heating for work and civilian users, as shown in SEAP ADDENDUM. The analysis of SEAP shows that there are significant results with the district heating but the electricity needs are increasing and it's difficult to meet through conventional channels. Rho has therefore decided to address energy and environmental problems in a revolutionary way, aiming to manage waste to create value in both electric field and thermal. This strategy allows to increase the result of 36,000 tonnes of CO2 reduced according to SEAP for 2020 with other 13,145 tonnes of reduced CO2 between 2019 and 2020

C.1.4 Potential obstacles and resistance

Potential obstacles and resistance

OWEIS makes use of innovative technology, that is also simple to manufacture and test, requires domestic products and "local workers"; its disruptive impact is given by the systemic action where communication and research will play an important role. The main obstacle analyzed concerns the management of calls for tender, relating mainly to the construction and development of the basic structure for the online presence and communication. OWEIS intends to move already from May to create the expressions of interest that allow to have organized the material for future tenders by the end of October. The contracted work will begin within four months from the start of the project. OWEIS considered all the possible actors both economically and socially in the design phase: the citizens who live in the target area, the municipal utilities that manage energy, waste and water, business associations as Distretto 33, local consortium of 74 companies. This helped to overcome the grievances and doubts on systems that will be used right from the conceptual development. It is specified that the work in condominiums will not create discomfort for the movement of citizens and that OWEIS will not create economic damage to those who currently manage the traditional recovery of waste and energy management. OWEIS aims to support cultural development to overcome any future obstacles through activities of communication and training on the experience of the "Sentinelle di Luce"

C.1.5 Integrated Approach

Integrated approach

OWEIS is a systemic and holistic action and will have as main theme the effects of anaerobic digestion developed with solid and liquid technologies. The digesters offer electricity (minimum 15% all year round) and thermal (DHW - domestic hot water - and heating), favoring agronomic crops ZERO meter (with CO2 and NPK), and water management. OWEIS will produce services and useful spaces to the report and social inclusion, in an ecological and sustainable economic framework. OWEIS supports a gradual approach, promises continuity but it has the ambition of transforming the disposal sectors in the neighborhoods and in individual residential sites. OWEIS will show that it is possible to improve energy independence by third parties and relate to others only under the effigies of free will and not by necessity. The proposals are scalable because it is directly related to anthropogenic actions. The project develops synergies with ongoing actions of SEAP, especially in information and communication field. In fact, the technical team will be supported by the academic and media experts in order to make a local project through European campaigns to engage every possible audience, from school to the condominium, from the professional to the public administrations. So, OWEIS captures not only all European guidelines for energy but also the optimal waste management, the social inclusion topics and increase the sense of belonging to Europe and its institutions

C.1.6 Link to ERDF thematic objectives and investment priorities

Link to ERDF Thematic Objectives and Investment Priorities

The UIA call supports the fourth investment priority of the ERDF (EU Regulations 1301/2013 and 1303/2013), "supporting the shift towards a low-carbon economy in all sectors". OWEIS responds well to nearly all points thanks to the anaerobic digesters [a] and [g]) for condominiums [c]) and companies [b]) and the development system and building redevelopment [c]). OWEIS enables development of intelligent local distribution [d]), allowing academic partners and those related to communication to analyze the data in order to innovate the technology [e), f), g]). OWEIS also supports the ERDF priority investment "6) preserving and protecting the environment and promoting resource efficiency" with the use of waste as RESOURCE [a]), and for water that will be recovered [b]), preserved and enhanced by innovative system and construction of the two plants, improving the urban environment by reducing pollution [e]). The social activities related to the redevelopment also allow, through the spaces set up and dedicated to nursery, laundry rooms, recreational places and socializing within the apartment buildings, to have connection with the objective "9) promoting social inclusion, combating poverty and any discrimination" for the points and actions a) and b)

C.2 Project context and local partnership

C.2.1 Link with other local/regional/national strategies and policies

Link with other local/regional/national strategies and policies

OWEIS integrates in Rho solutions for the environment, carried out through the SEAP and the dissemination and education activities. The "Sentinelle di Luce" is among the best practices with active involvement of students and teachers that inspires proactive communication system of the project. OWEIS differs from the shares at "Zero waste", with innovative wrappers and "thermo coat absorber" covers, for the purpose of energy recovery and water, with environmental, economic and social purposes. The regional ERDF proposes the Axis IV "Supporting the transition to a low-carbon economy in all sectors" with a budget of 194 million euro, equal to 20% of the regional ERDF. The axis line "Reducing energy consumption in buildings and public facilities, or to public use" is the local theoretical basis for OWEIS, which was already present in the TREND project, the supporting action of Lombardy Region to identify, promote and support energy conservation and energy production with alternative financing, in small and medium enterprises. The line is also present in SEAP, signed by 1294 Italian municipalities, including Albairate (MI) that intends to reduce by 80% CO2 emissions. OWEIS engaging the data of Lombardy Region, Istat and Legambiente on these issues to undertake the analysis and communication activities, supporting the miniaturization of energy efficiency systems and helping to put in common the micro anaerobic digestion, in a distributed and pervasive way

C.2.2 Synergies with other projects and initiatives

Synergies with other projects and initiatives

OWEIS aims to miniaturize the anaerobic digesters, in urban contexts redevelopment and construction, using innovative covers and wrappings. EU projects like BIOMAS3 and Bioenergy Farm are the basis to analyze digesters, in order to obtain an updated response and comparable with OWEIS. For this reason, OWEIS does not consider projects previous to 2013 like BIO-EN-AREA. BIOMAS3 and Bioenergy Farm are macro projects for the installation of small digesters with "old" technology, in agricultural and rural areas. They are useful for comparing potential cost of the current technologies. OWEIS will trigger a critical comparison normalized on urban organic wastes with careful measurements of environmental gradients and their social and economic value. SEAP actions as Ahbarijiet, R2Cities and Bresaer, were analysed to compare the construction efficiency. It was also studied "How to Refurbish All Buildings by 2050". In terms of research, OWEIS will be supported by three research institutes for scientific analysis, big data and social, relating to their experiences, national and European. Locally, OWEIS will integrate the district heating network and traditional construction redevelopment of SEAP, showing further potential actionable benefits in terms of energy, environmental and socio-economic. OWEIS aims to support development actions in Gentilecare activities for the elderly and disadvantaged people in general that live in the municipal apartment buildings, subject matter of the action

C.2.3 Involvement of wider stakeholders in project design

Involvement of wider stakeholders in project design

OWEIS involved right from the planning stage, direct and indirect actors of the action, including the experts of the market segments, as well as the experienced management and communication in public and private projects, as Db5 Studio, Techinnova and Vivido, to seize right from "beginning of the global vision", often lacking in vertical professionalism. Companies have also given indications on the possible parts of communication that will be developed for procurement. Three key subjects emerged: the residents and businesses in the neighborhood, research institutes, municipal and operators who have interest in the management of primary resources (water, electricity, gas, sewage, wet and connectivity). End users involved in the design phase have expressed both interest in the project that the current critical of the condos and the area of action to the point of implementing social activities in the objectives. Municipal, as NET for energy and Cap Holding for water, were encountered for information and comparisons on the respective flows. With NET emerged the least load and positive effect on district heating in apartment buildings. Cap Holding has shown not only the least water load which results in a less critical of the waste management, recycling and rain water recovery, but above all, the positive contrast to the acute weather events and consequent lower hydrogeological, thanks to the coverage and innovative solutions (collection, storage and deferral). The universities were approached for collaborations, on data analysis activities, event management, and academic support: on the front of IT / ICT, OWEIS has cooperated with Prof. Puliafito of the Department of Computer Engineering of the University of Messina; for Mechanical Engineering and Plant Design was involved Prof. Stefano Farné of the University of Pavia. Academic support was also provided by some degree theses concerning the relevant issues and developed by graduates of the contacted professors

C.2.4 Involvement of wider stakeholders in project implementation

Involvement of wider stakeholders in project implementation

OWEIS aims to exploit the networks developed in the Open Innovation platform of Lombardy Region. Private managers of OWEIS, specifically Ga.Fer Trading and Future Power have helped to create synergies between the working group with thematic experts in compliance with the procurement codes. The private partners have developed the ideas and synergies reporting at least every three days to Rho. The City has played a very active role, by providing contacts with strategic partners such as municipal and giving directions, during the working phases, to address the project development in line with the local specificities. Rho has chosen to manage with public procurements different activities, not only of construction, in order to give the opportunity to small local companies or great university (eg: Prof. Malpei of Polytechnic of Milan - Dica) involved in other project, to give their contribution to the project. One of the key aspects of the project that will be tendered will be the communication and the search for the social sector in order to ensure these strategic aspects for a smooth running of the project. Ga.Fer Trading and Bicocca University have followed different actors and professionals with experience in the media field and regional and European projects for the development of online media, communications and event management. They were developed several meetings with Future Power, solid state technology expert, Vivido srl for programming skills of sites and social monitoring systems, DB5 for the management of video events and communication in order to better support the WP Communication. For the development of future public procurements for constructions, OWEIS has chosen to involve the Consortium of Distretto33, stronger than 74 local companies operating in many fields. Distretto33 will cooperate with OWEIS to ensure the necessary technical characteristics to fulfill the tasks for which future calls will be developed

C.3 Project objectives, results and outputs

C.3.1 Overall objectives and expected results (changes in the local situation)

PROJECT main objective(s)

The main objective of OWEIS will be to reduce CO2 emissions at least of 13,000 tons before the 2020. It will be possible thanks to a pilot project that allows to grasp the potential of two new types of technologies: - Those that miniaturize the anaerobic digesters, creating energy from the organic anthropogenic - Those that enhance, producing energy, building redevelopment. It is indeed recalled that the exploitation of such substances is currently carried out only through large plants, such as that of Pinerolo that covers the needs of 800 thousand inhabitant equivalent. The second and third objectives are already explained by the technologies and fall within the "2020 Energy Strategy: the develop of energy from renewables and the increase in energy efficiency. The last goal has a social impact: the project plans to continue the energy education and developing actions in favor of vulnerable groups who can take advantage of new spaces and activities. OWEIS strengthens the action developed by Rho for schools, implementing it with open events and seminars to citizenship, and it will be crucial the role of research institutions and communication. The redevelopment allows the management of "new spaces", the development of social activities, of "nursery" and other infrastructure for vulnerable people, involving the inhabitants of condos, not only from an environmental and economic point of view, but also socially, making strong the image of the government and of Europe

PROJECT main result(s) OWEIS aims to break down of 6,572.34 tons/ly of CO2 produced from Rho. The results of three actions will be monitored in the project: • The action of construction and energy renovation of apartment buildings, optimizing the overall use of primary resources, see water management, with innovative coverings and system solutions; • That born from the anaerobic digester to liquid technology to manage the organic anthropogenic environment in urban settings, particularly to apartment level • That of the anaerobic digester to solid technology to enhance the scraps of companies related to the Ho.Re.Ca. The condominium target area is owned by the city, already subject to intervention measures of SEAP with district heating. OWEIS aims to socially rehabilitate the area in addition to reducing CO2, showing how, by investing in sustainable energy technologies, it is possible to release capital in favor of social actions for disadvantaged people, infants and the elderly in particular. The area will have the electrical and thermal energy contribution, freeing the municipal updating of certain components in the central site, in economic and social perspective has decided to support an innovative project from renewable sources, with a pioneering action, in order to demonstrate and then replicate extensively

C.3.2 Outputs

Work package	Project output	Target value of project expected output(s)
WP.6 Valorization of Organic waste and the Construction Redevelopment	Creation of a Micro Anaerobic Digester	1
	Mini Anaerobic Digester connected	1
	Building Redevelopment and Poppy Roof	1

C.3.3 Measurement of results

Measurement of results OWEIS has among its priorities the management of five types of monitoring, aiming to supervise: the general progress of the project; management and construction (construction of digesters and retraining); the management of service and business waste; monitoring of company activities; management of communication activities. From an environmental perspective, OWEIS prepares tests and certifications on the utilities used by the condos, before and after the work, in order to objectively measure the effects. The certifications will make official the actions carried out, in accordance with Italian and European standards. Expenses for utilities will be monitored to analyze the MICRO system. Water parameters, light, gas, waste water, damp and connectivity of the previous three years will be rationally compared with those of the project period in order to assess the actual effectiveness of the intervention. The MINI system will be subjected to similar monitoring, with thermal and electrical energy produced analysis and related by-products valued. The target values are stable over a minimum savings of 70% compared to the reference period recognized. Monitoring will be carried out in the MICRO and MINI system on a monthly basis during development and quarterly after testing, to detect the actual state of progress towards the goals, outlining also input to the line of communication and dissemination of the project in the professional media as LinkedIn, thus giving the opportunity to spread the project not only locally. The historical analysis of data on utilities for the reference period will have a timeline such that it will be unlikely that the change brought by the project could fall in the standard deviation of the usual 20% and measure the actual significance with T-Student, correlating all the historical data retrieved from activated universities

C.3.4 Methodology for monitoring and measurement of outputs and results

Methodology for monitoring and measurement of outputs and results OWEIS will activate 5 types of monitoring: there will be the one for the execution of construction work upgrading; one for the creation and management of digester; one to analyze the chemical and scientific data coming from the digesters; one to analyze social activities and finally one for the management, dissemination and communication of the project. Rho and SES ASA supervise the construction works for the MICRO and MINI system, monitoring according to the rules of national construction works produced by delivery partners and the contracting companies. The companies will be supported by the Municipal ASER and sector professionals. OWEIS will use the skills of the management system of ASER for scientific management, integrating the data with the academic and professional skills of delivery partners, as Agrinova and computer experts from the universities involved. The university Bicocca will customize the project, to carry out social monitoring, with the SUMI (Software Usability Measurement Inventory), using adequate metrics. The social users, in the preliminary stages and then in pilot tests, will fill out forms EQ-5D, suitably profiled on the social level. A retrospective analysis will be made using GDS (Geriatric Disease Scale) and MMPI (Minnesota Multiphasic Personality Inventory) modeled on the user in question. It monitors the penetration of use and implementation of the new arrangements, as well as services predisposed towards the elderly and the disadvantaged

C.3.5 Target groups

Target Groups OWEIS settles in the hamlet "Mazzo di Rho" (via Rosselli, Via Balzarotti), acting on three municipal condos for MICRO system, while the MINI is setting up in the industrial area (via Risorgimento). The two actions for the environment are developed: a) in the urban context on three apartment buildings owned by the municipality; b) in the peri-urban context, with on-site management of 2000 tonnes of municipal biowaste. The advantages are first of all environmental, with CO2 reduction: the project will develop the energy instead produced from fossil fuels. The actions encourage the entire community to manage and exploit the waste into energy and other primary resources (CO2, liquid fertilizers, water), projecting into the future best economies, less dependence on third parties, a better environment. OWEIS offers the inhabitants of the new condos spaces and activities in support of vulnerable subjects, with "Smart Space" project of the social system. This area is targeting the weak users and / or over 60, which will benefit not only the economic and environmental evidence, even of social support and monitoring. The municipalities will be proud to contribute to sustainable urban development, by downloading the logistics and infrastructures dependent on the need of fossil fuels, by supporting the enhancement of wet and participating in a new vision of coexistence in the neighbourhood

C.4 Project Project scaling up and transferability

C.4.1 Scaling up of the project

Scaling up of the project OWEIS aims to follow the miniaturization of technology, useful to create systems to "0 km", directly from the producer without the need for long displacements, and to overcome potential barriers of the major energy companies in the development of renewable energies, as stated in various directives. The communication activities will be carried out with technical energy experts, university professors and communication experts to disseminate the project and its environmental and economic potential far beyond the city limits. The communication activities will exploit the data of the research section and monitoring to remove any doubt from the benefits of building renovation and installation of anaerobic digesters. OWEIS will disseminate not only the data of CO2 saved through the built systems, but also of CO2 saved through less use of transport logistics for energy and waste. OWEIS aims to participate between 2017 and 2019 not only to UIA events, but also to the national and European environment and to develop new technologies, acting as a "best practices" both environmental and socio-economic. MINI & MICRO sections may be transferred to any urban reality, for its own uniqueness: enhance the organic anthropic with small-scale systems (10-100KW). OWEIS encounters more difficulties for the construction of rehabilitation section, where the innovative creation of covers and casings (thermo absorber), will create a comparison with the reference standard for building "Poppy Roof", variation of "butterfly roof". The Smart Space section, focusing on social, will be the subject of further dissemination activities showing how environmental issues is linked to social not only for training and communications to users, but also for the need to make it accessible also to disadvantaged groups the potential technological and environmental. OWEIS will be present or will create 9 events and it will follow the online channels to spread the project involving EU municipalities and big companies

C.4.2 Transferability of the project: evidence of demand for your project in other cities

Transferability of the project: evidence of demand for your project in other cities

The need to reduce greenhouse emissions by 20% by 2020 and by at least 40% for 2030 is part of EU strategy, involving every state and administration. OWEIS captures all the objectives of the Energy Strategy 2020, going well beyond the result of 20% and small budgets. The project will be seen as the aggregation of the three main lines: two lines oriented on the use of renewable sources through the development of existing waste, one linked to the innovative construction redevelopment. This approach enables Urban Authority to act on citizens and to put virtuous remedies demanding solutions dependent on large remote complexes, preserving a value to its territory. The monitoring of the three lines allows the authorities to determine how to modulate the project, bearing in mind that the main economic effort of the project is related to redevelopment and energy exploitation of the buildings and utilities in general, which, achieving critical mass in the same place, creating more value and efficiency of the project. Research and dissemination of the project, as the budget shows, is designed not only to meet the scientific needs of the project, but also to give the opportunity to the authorities to monitor the work process and results, carefully assessing its reproducibility in also different environments, such as North Europe. The working group aims to invite the local authorities (that manage at least 30-100 thousand inhabitants), in the online meeting or in Rho events to promote the project and to show the opportunity to use Italian technology with workers and local resources. They will be invited national and European stakeholders and authorities, from the UIA lines, Smart Cities and work-related projects and the environment

Part D - Work plan

Number	WP Title	Start Date	End Date	WP budget
1	Project preparation	15/12/2015	31/10/2016	20,000.00

Partners' involvement

WP responsible partner: Comune di Rho

Summary

Preparation and submission of the application form

Work Package Budget

Partner name	Staff cost (€)	Office and administration (€)	Travel and accommodation (€)	External expertise and services (€)	Equipment (€)	Infrastructure and construction works (€)	Sub-Total (€)	Revenues (€)	Total (€)
Municipality of Rho	0.00	0.00	0.00	20,000.00	0.00	0.00	0.00	0.00	20,000.00

Work Plan Per Work Packages - WorkPackage 2 (Project Management Work Package)

Title	Project management
Start Date	01/11/2016
End Date	01/11/2019
Budget	478,575.00

Partners Involvement

Responsible Partner	PP1 - Comune di Rho
Involved Partners	PP1 - Comune di Rho PP2 - SES Enser Engineering srl PP3 - ASER - Azienda Servizi del Rhodense SpA PP4 - AGRINNOVA - Università degli Studi Torino PP5 - Università degli Studi di Milano – Bicocca PP6 - Dipartimento di Design - Politecnico di Milano PP7 - SES ASA ENGINEERING srl
Summary	<p>The aim of the Project Management (PM) is to apply knowledge, tools and techniques to all the activities to be carried out during OWEIS, in order to ensure the achievement of the expected results within the parameters of time, quality and resources set out by the contractual agreements with the European Commission. It will be developed in 5 Tasks:</p> <ol style="list-style-type: none"> 1. Structure of PMB, OPM & PMA (Board, Operational, Administrative Project Management) 2. Development of internal communication 3. Reporting and Evaluation Procedures 4. Risk and quality management 5. Capitalization <ol style="list-style-type: none"> 1. Set up of PM to enhance the management skills of the individual partners. There will be developed a PMH (Project Management Handbook) that will support the Consortium Agreement in the management of project and the role of all the partners 2. 6 meetings will be developed to support PM. For the daily management, it will be developed also online meetings every two months to monitor the ongoing of the works (from the tenth month). The communication, chemistry and social research will be developed from the second year. 3. The reporting system will be developed by partners 1, 3, 4, 5, 7 with the support of PMH, outlining the forms for internal meetings, seminars and dissemination events and social activities. 4. Risk & quality management will be developed with the best tools of PP 4,5,7 and the legal support of PP 3 5. Support, management and dissemination of knowledge and its acquisition with UIA Experts

Activities and Deliverables

Activity number	Activity title	Activity description and partners involved	Start date	End date
A.2.1	Structure of PM	Implementation of tools and process to enhance the PM as the creation of the PMB and the guideline PMH, to apply knowledge, tools and techniques to all the activities to be carried out during the project life cycle, in order to ensure the achievement of the expected results within the given constraints and resources framework, in accordance with the EU Agreement and the Consortium Agreement. It's responsible to the involvement of UIA experts and their competences OWEIS partners involved	Start date 01/11/2016	End date 01/11/2019

Activity number	Activity title	Activity description and partners involved	Start date	End date
	Deliverable number	Deliverable	Target value	Delivery date
		Title		
		Description		
D 2.1.1		PMB (PROJECT MANAGEMENT BOARD)		
		Formalization of PMB through a meeting, in accordance with European contracts and the Consortium Agreement, to manage the roles and responsibilities. PMB will meet minimum every 6 months and in urgent needs, will be responsible for the following issues: Decision and monitoring of WP and tasks to have the general overview and control of change and risk management, ensuring that proposals for any changes are implemented in a timely fashion ensure that project refers to quality control plan	Target value 1	Delivery date 13/12/2016
D 2.1.2		PMB minute		
		Each PBM meeting will see the creation of minutes / reports that provide screening for the meetings and major decisions. Reports will be written within two days of the meetings and will be published on the project website	Target value 6	Delivery date 14/12/2016
D 2.1.3		PMH - Project Management Handbook		
		The PMH will illustrate the management and reporting procedures to be followed by all partners. PMH will analyze the difference between the progress of the project and the Workplan, taking corrective actions where necessary. This ensures the proper management reporting from both the formal and informal standpoints, ensuring that the activities will be delivered in time and with quality level. There will be a section to resolve conflict in the Consortium or with external	Target value 1	Delivery date 15/02/2017
A 2.2	Internal Communication	the PM will be responsible for the communication management, ensuring effective communication flows within the Consortium and between the Consortium and the European Commission. There will be at least 6 meeting (1 every 6 months). There will be online meeting every month to support all the activities. In case of need, OWEIS will program online meeting to support necessities. The meetings for internal communications will take place after the PMB. OWEIS partners involved	Start date 13/12/2016	End date 01/11/2019
	Deliverable number	Deliverable	Target value	Delivery date
		Title		
		Description		
D 2.2.1		Report of Meeting		
		Each meeting will see the creation of reports that provide screening for the meetings and decisions. Reports will be written within two days of the meetings. The template of report will be the same for meetings online and face to face	Target value 42	Delivery date 14/12/2016
A 2.3	Reporting and Evaluation Procedures	The activity will be developed with support of the partners according to this scheme: Financial: PP 1 Legislation on waste: PP 3 Development of construction: PP 2,6,7 Social Development: PP 5 Analysis and research on waste: PP 4 The development of the report Reports and evaluations will follow the PMH and guidelines related to the risk and quality management.	Start date 13/12/2016	End date 15/02/2017
	Deliverable number	Deliverable	Target value	Delivery date
		Title		
		Description		
D 2.3.1		Reporting and Evaluation Procedures - Guidelines		
		The guideline for reporting and evaluating the project will be developed as an internal section of the PMH specifying how to make the reports and assessments according to the points mentioned	Target value 1	Delivery date 15/02/2017
A 2.4	Risk and quality management	A.2.4 is related to 3 types of events: Investment Development: activities in public procurement and delivery partner activities must be coordinated Scientific and Technological: risks related to technological and scientific difficulties occurring mainly in the modelling and simulation activities Ethical: they are risks related to the implementation of social section of OWEIS OWEIS partners involved	Start date 13/12/2016	End date 15/02/2017

Activity number	Activity title	Activity description and partners involved		Start date	End date
	Deliverable number	Deliverable		Target value	Delivery date
		Title	Risk and Quality Guideline		
	D 2.4.1	Description	The section of Risk and Quality (R&Q) management will be part of the PMH. The aims of this guideline is to support the A.2.4 problems giving procedures and supporting processes to optimally overcome any risk, always having the goal to create the products / business / services with the best quality. For this reason they will be interviewed stakeholders who have supported the project, and that could fit into OWEIS through activities in procurement	Target value 1	Delivery date 15/02/2017
A 2.5	Capitalisation	1) Involvement of UIA experts for: -Advice and guidance on the substance of the action -Assistance in the development of documentation and outputs that will capture and disseminate lessons learnt, good practices, etc. -Support to ensure that the action remains on track and is in line with the agreed proposal 2) Participation to the activities of the Urban Development Network 3) Participation to national/international conferences to share lessons learnt and good practice on ongoing basis		Start date 01/11/2016	End date 01/11/2019
	Deliverable number	Deliverable		Target value	Delivery date
	D 2.5.1	Title	Thematic deliverables produced by UIA Experts on ongoing basis	Target value 1	Delivery date 01/11/2019
		Description	Thematic deliverables produced by UIA Experts on ongoing basis		
	D 2.5.2	Title	Other deliverables related to capitalization activities	Target value 1	Delivery date 01/11/2019
		Description	Other deliverables related to capitalization activities, in particular to exploit OWEIS in Europe.		

Work Package Budget

PP1 - Comune di Rho	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	D1 level will be full time as PM C3 level (tech. expert) 30 months B5 level 28 months. Costs rounded off with inflation forecast	N/A	The PM Coordinator will participate to EU and UIA events to disseminate OWEIS results and acquire best practices for the project					
Amount (€)	210,000	31,500	10,000	0	0	251,500	0	251,500
PP2 - SES Enser Engineering srl	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	N/A	N/A		Mr Cesareo will be external responsible for this wp. He will support the activities of the WP that will influence the management and development of the Micro System				
Amount (€)	4,000	600	0	20,000	0	24,600	0	24,600
PP3 - ASER - Azienda Servizi del Rhodense SpA	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total

Description	Manager involved for 8 months Technicians for 5 months, operatives for 3 months. They will give the "legal contribution" to the WP. Cost is rounded off without inflation forecast	N/A						
Amount (€)	37,000	5,550	0	0	0	42,550	0	42,550
PP4 - AGRINNOVA - Università degli Studi Torino	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	Ordinary professors and researches involved for 3 months. Cost is rounded off without inflation forecast	N/A						
Amount (€)	10,000	1,500	0	0	0	11,500	0	11,500
PP5 - Università degli Studi di Milano – Bicocca	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	Ordinary professors and researcher involved for 6 months. Cost is rounded off without inflation forecast	N/A						
Amount (€)	19,500	2,925	0	0	0	22,425	0	22,425
PP6 - Dipartimento di Design - Politecnico di Milano	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	Ordinary professors and researcher involved for 4 months. Cost is rounded off without inflation forecast	N/A						
Amount (€)	20,000	3,000	0	0	0	23,000	0	23,000
PP7 - SES ASA ENGINEERING srl	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	Mr Bardoni was the internall responsible of the wp with a effort of 60 day / 2 months.	N/A		Ms Ferro of Ga.Fer Trading will be the main responsible for ASA in this wp for all the project				
Amount (€)	20,000	3,000	0	80,000	0	103,000	0	103,000
Total (€)	320,500	48,075	10,000	100,000	0	478,575	0	478,575

Indicative budget breakdown per year					
Year	2016	2017	2018	2019	Total
Amount (%)	10.00 %	40.00 %	30.00 %	20.00 %	100.00 %
Budget (€)	47,857.50	191,430.00	143,572.50	95,715.00	478,575.00

Work Plan Per Work Packages - WorkPackage 3 (Communication Work Package)

Title	Communication
Start Date	01/11/2016
End Date	01/11/2019
Budget	469,600.00

Partners Involvement

Responsible Partner	PP6 - Dipartimento di Design - Politecnico di Milano
Involved Partners	PP1 - Comune di Rho PP2 - SES Enser Engineering srl PP3 - ASER - Azienda Servizi del Rhodense SpA PP4 - AGRINNOVA - Università degli Studi Torino PP5 - Università degli Studi di Milano – Bicocca PP6 - Dipartimento di Design - Politecnico di Milano PP7 - SES ASA ENGINEERING srl

Summary

The communication will have a strategic role both internally and externally: on the one hand serve to organize through "public manifest" and online campaigns the development of the work, also in procurement. The other side will serve to show the results of the project, from the training and information intermediate to those final related to the closure of the three investments and the section of the social activities.

WP3 will be led by the PP6 with the support of private delivery partners. It will develop with both face to face and online events to disseminate the project with more incisiveness. The online presence will use 'adwords' campaigns to support the events. It will play daily dissemination activities in the specialized forums and in professional channels as LinkedIn. video management of the main events will be applied in order to have an excellent quality in the dissemination activities. 5 micro training videos will be created in the first year to show the main activities: on the project, on the two digesters, one on the innovative redevelopment and finally on the social side of the project. OWEIS exploit academic institutions to publish papers on data (chemical, economic and social) of the project. Promotional material will be managed by PP5 that, as leader of the Social Section will be interested in supporting communication for those subjects, such as the elderly, more related to the old media and traditional marketing tools.

Communication objective

WP3 will develop the best strategies to make visible and attractive the project not only for citizens, but also for environmental experts, companies and municipalities in order to create the very first year the foundation to transfer the project to stakeholders. The WP will schedule at least three months in advance of the main events in order to prepare the best campaigns and dissemination activities and will follow the PMH to overcome the difficulties which might arise in its work

Target groups

There are 3 targets for communication:

- Citizens Rhodenses, with campaigns and events to outline the commitment of the city in an EU environmental project. Disadvantaged citizens will be considered with a social campaigns.
- EU citizens may be involved in events and online campaigns to show the benefits of OWEIS and its transferability
- EU mayors/administrators, invited and involved also online to show the project and share economic and environmental best practices

Activities and Deliverables

Activity number	Activity title	Activity description and partners involved	Start date	End date
A 3.1	Start up activities	The first activities will be created before march 2017 to disseminate the project and its objective. There will be involved other environment projects to support and share best practices. All partner will be involved in the event that will be located in the municipality and where will the two digesters be built.	01/11/2016	14/04/2017
	Deliverable number	Deliverable	Target value	Delivery date
	D 3.1.1	Title: Official presentation of the project Description: There will be printed and disseminate in the target area the Official presentation of the project.	1	31/03/2017
	D 3.1.2	Title: Video of A.3.1 Description: The video of the activity will be developed and charged online paying attention to its quality and usability	1	14/04/2017

Activity number	Activity title	Activity description and partners involved	Start date	End date
A 3.2	Publications	<p>Universities develop at least 10 papers related to</p> <ul style="list-style-type: none"> - Innovative construction projects; - chemical and environmental research; - developments of the social activities and results. <p>Papers will use not only the data but also the networks of skills developed online and offline around the project, allowing to create comparisons and best practices with environmental and social EU projects.</p> <p>PP.4,5,6 involved</p>	Start date 01/12/2016	End date 01/11/2019
	Deliverable number	Deliverable	Target value	Delivery date
	D 3.2.1	<p>Title Papers</p> <p>Description Publication of papers on specialized journals, analyzing data of construction, of chemical and social analysis</p>	Target value 10	Delivery date 01/11/2019
A 3.3	Digital activity	<p>Digital activity supports events in the communication of the project in Italy and Europe. It will develop:</p> <p>Creation of an integrated website with:</p> <ul style="list-style-type: none"> -project presentation -Integration with social channels -Section related to the activities and events -Monitoring of the project of economic and environmental data <p>Creation of professional pages and presence in specialist forums</p> <p>All the activities will be support by partners. PP. 6 is the leader</p>	Start date 01/11/2016	End date 01/11/2019
	Deliverable number	Deliverable	Target value	Delivery date
	D 3.3.1	<p>Title Website</p> <p>Description Creation of an integrate website: -project presentation (within two months after the start of the project) -Integration with social channels -Section related to the activities and events -Monitoring of the project of economic and environmental data</p>	Target value 1	Delivery date 01/02/2017
	D 3.3.2	<p>Title Online presence</p> <p>Description This will create a LinkedIn page of the Project and in the first two months OWEIS will monitor the forum and the most active environmental projects in order to share information and best practices. OWEIS will create articles and post at least every two days to make the strong online presence and the interest of users. Every month there will be a minute to report the online presence activity and results. PP.2, PP5 Leaders.</p>	Target value 0	Delivery date 01/11/2019
A 3.4	Public events	<p>Public events will serve to show the sections of the project in their start-up, the working phase and the closing phase. OWEIS will involve especially the citizens of Rho though experts and professionals of similar European projects will be invited. Mayors and public administrators will be invited in the first year to show the potential and engage them in a future in the project transferability</p>	Start date 01/01/2017	End date 01/03/2019
	Deliverable number	Deliverable	Target value	Delivery date
	D 3.4.1	<p>Title Public events</p> <p>Description There will be at least 12 major events in addition to start-up: six for the realization of digester; three for the building redevelopments three for social activities. Each section then will see a start event, one to report the activities developed and one to the work closing. The events will be supported by communication experts who have won the tender and the online communication activities and traditional media. OWEIS will invite mayors and public administrators PP1 Leader</p>	Target value 12	Delivery date 01/03/2019
A 3.5	Promotional material	<p>Promotional material will be thought especially in the environmental and social perspective. PP5 develop relationships with companies in order to develop the best material for the activity</p>	Start date 01/11/2016	End date 31/12/2017

Activity number	Activity title	Activity description and partners involved		Start date	End date
	Deliverable number	Deliverable		Target value	Delivery date
	D 3.5.1	Title	Creation of leaflet for social activity	Target value	Delivery date
		Description	The activities will be developed to capture the interest of the less social. The target will be the elderly and especially the disadvantaged	1	06/04/2017
A 3.6	Media relations	The media relations will be handled by the Municipality with the support of universities. The goal will be to have a concessional line to TV and radio channels for the dissemination of the project and its progress		Start date	End date
				01/11/2016	01/11/2019
	Deliverable number	Deliverable		Target value	Delivery date
	D 3.6.1	Title	Report on communication with the media.	Target value	Delivery date
		Description	It will be developed every six months a report with the activities carried out and to be carried on in the next six months to the dissemination activities.	6	01/03/2019
A 3.7	Final dissemination activity (mandatory)	OWEIS ends with a three-day event in which will be shown the results of the project. Partners and municipalities known during the period of work will be invited to disseminate and transfer the project itself in the future in Europe. UIA and the EU managers interested in the environment will be invited well in advance. This activity will be prepared from the beginning of 2019 in order to give maximum exposure and impact to the project from the perspective of transferability and dissemination		Start date	End date
				03/01/2019	01/11/2019
	Deliverable number	Deliverable		Target value	Delivery date
	D 3.7.1	Title	Final Event	Target value	Delivery date
		Description	It will be prepared the largest hall of the Municipality to welcome Italian and foreign participants of the event. The event will be located also in the investment objective district	1	01/11/2019

Work Package Budget

PP1 - Comune di Rho	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	Managers and Technicians are involved in this wp. Livel Managers C3.15 months on Communication. Level B5 will work for 7 months. Cost is rounded off without inflation forecast	N/A	Dissemination of the project in Italian and EU events	Public procurement to manage the online support, video and 5 training video				
Amount (€)	50,000	7,500	6,000	80,000	0	143,500	0	143,500
PP2 - SES Enser Engineering srl	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	N/A	N/A		Mr Cesareo will be external responsible for this wp. He will support the activities online in accord to the partners				
Amount (€)	7,000	1,050	0	35,000	0	43,050	0	43,050

PP3 - ASER - Azienda Servizi del Rhodense SpA	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	Activities to support the project communication and events involves: Manager for 10 days; technicians for 2 months and operatives for 7 months. Cost is rounded off without inflation forecast	N/A	Travel and accomodation					
Amount (€)	23,000	3,450	5,000	0	0	31,450	0	31,450
PP4 - AGRINNOVA - Università degli Studi Torino	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	N/A	N/A						
Amount (€)	0	0	0	0	0	0	0	0
PP5 - Università degli Studi di Milano – Bicocca	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	Cost of Researcher staffs and professors involved in pubblication activities and management of big data. Cost is rounded off without inflation forecast	N/A	Support to national and EU Events					
Amount (€)	34,000	5,100	7,000	0	0	46,100	0	46,100
PP6 - Dipartimento di Design - Politecnico di Milano	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	Activity to support WP3 Cost of Professors Ceppi, Ferrara and the future researchers are rounded off without inflation forecast	N/A	Support to national and EU Events					
Amount (€)	70,000	10,500	10,000	0	0	90,500	0	90,500
PP7 - SES ASA ENGINEERING srl	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	Cost of create technical support for the communication activities Costs are rounded off without inflation forecast	N/A	Activities of dissemination with expert Lavanga, Ferro, Bardoni, during all the project	Ms Ferro will be external responsible for this wp. She will support the activities in accord to responsible partner				
Amount (€)	20,000	3,000	12,000	80,000	0	115,000	0	115,000
Total (€)	204,000	30,600	40,000	195,000	0	469,600	0	469,600

Indicative budget breakdown per year					
Year	2016	2017	2018	2019	Total
Amount (%)	3.00 %	30.00 %	35.00 %	32.00 %	100.00 %
Budget (€)	14,088.00	140,880.00	164,360.00	150,272.00	469,600.00

Work Plan Per Work Packages - WorkPackage 4 (Implementation Work Package)

Title	Research
Start Date	01/11/2016
End Date	01/11/2019
Budget	315,750.00

Partners Involvement

Responsible Partner	PP4 - AGRINNOVA - Università degli Studi Torino
Involved Partners	PP3 - ASER - Azienda Servizi del Rhodense SpA PP4 - AGRINNOVA - Università degli Studi Torino
Summary	<p>The research will be based on two strategic aspects of the project: on the one hand there will be a chemical analysis of the output of the digesters, on the other there will be legal analysis of the output of the digesters and of the innovative retraining, especially for the poppy roof.</p> <p>The objective will be to get the data to normalize the small scale systems so far not considered because non-existent, from the Italian legal system and analyze/support the legislation that currently does not provide for the development of "inverted roofs parabolic". The chemical analysis of the output of the digesters involves the possibility of using these by-products of the project for agricultural purposes.</p> <p>The action of chemical research will be supported by the law so that in case the outputs comply with the environmental standards and the soil and fertilizer management, the product could be introduced "in the market" by creating an additional environmental and economic benefit to the project.</p> <p>The partners involved in the research have expertise in the analysis for biosafety, as the experience of Agrinnova in the projects carried out, and in the legal management of wastes and their flows, concerning ASER.</p>

Activities, Deliverables and Outputs

Activity number	Activity title	Activity description and partners involved	Start date	End date
A 4.1	Chemical Research	<p>The chemical analysis will follow the digesters to monitor</p> <ul style="list-style-type: none"> • Solid output, which could be used as fertilizer • Output Liquid with the possibility to use it as fertilizer • Water management in MICRO digester with the possibility to produce clarified water from liquid waste <p>The "solid" has a well-established research service. The project will seek to formalize, if it meets the specifications, its possible function as fertilizer. The MICRO is a pilot project that needs of all the researchs</p>	Start date 01/11/2016	End date 01/11/2019
	Deliverable number	Deliverable	Target value	Delivery date
	D 4.1.1	<p>Title Solid Analysis</p> <p>Description OWEIS will create a document with the chemical data of the Output of the anaerobic digester to solid technology at the end of the project. In the case of the first test is positive, PMB will consider the aspect of using the product within the condominiums or enter it in the markets</p>	Target value 1	Delivery date 01/11/2019
	D 4.1.2	<p>Title Liquid Analysis</p> <p>Description OWEIS will create a document with the chemical data of the Output of the anaerobic digester to liquid technology at the end of the project. The data will be on the output to be used as fertilizer and on the water, that could be used for non-drinking purposes. There will be two target value: one for the output, the other for water. In the case of the first test is positive, PMB will consider the aspect of using the product within the condominiums or enter it in the markets.</p>	Target value 2	Delivery date 01/11/2019
	Output Number	Project output	Target value	Delivery date
A 4.2	Legal Research	<p>The Legal research involves all those activities in support of waste management also giving directions for the energy upgrading section with regard to the current legislation. ASER will analyze the Italian and European legislation to analyze the critical and highly innovative aspects of the project that might generate a request for an adjustment by the legislature if the parameters for the protection of the environment are respected and the person.</p>	Start date 01/11/2016	End date 01/11/2019
	Deliverable number	Deliverable	Target value	Delivery date
	D 4.2.1	<p>Title Solid output legal management</p> <p>Description ASER will analyze the legislation limiting solid compounds from waste products for agricultural or commercial purposes, monitoring, in close contact with the chemical research, the possible use of output solutions generated by the MINI system. It will be developed a final document with all the solutions subsequently found to chemical data analyzed during the project The analysis will start from the creation of the system until the end of the project</p>	Target value 1	Delivery date 01/11/2019
	D 4.2.2	<p>Title MICRO system output legal management</p> <p>Description The management of MICRO system output will focus both on the use of the product as a fertilizer, is water that could be exploited for non-potable. In water analysis will also have policies for the enhancement generated by the construction redevelopment. It will develop a single document for the two investigations because strictly binding from the production system. The analysis will start from the creation of the system until the end of the project</p>	Target value 1	Delivery date 01/11/2019
	D 4.2.3	<p>Title Innovative building redevelopment</p> <p>Description Legal analysis related to the innovative construction redevelopment includes the monitoring and analysis of the Italian and European legislation to support the innovative program. It is for the PMB to use this brief research in order to develop actions with the legislature in order to update the legislation by holding updated and available for technology</p>	Target value 1	Delivery date 01/11/2019
	Output Number	Project output	Target value	Delivery date

Work Package Budget

PP3 - ASER - Azienda Servizi del Rhodense SpA	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	Cost of staff to support the legal activity on wastes, rounded off without inflation forecast: Mangaer for 6 months, Technicians for 20 months Operative 26 months	N/A	Seminar and activity to support and share the Research					
Amount (€)	105,000	15,750	5,000	0	0	125,750	0	125,750
PP4 - AGRINNOVA - Università degli Studi Torino	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	Staff of Researcher to support chemical Research. The cost is rounded off without inflation forecast	N/A	Seminar and activity to support and share the Research					
Amount (€)	160,000	24,000	6,000	0	0	190,000	0	190,000
Total (€)	265,000	39,750	11,000	0	0	315,750	0	315,750

Indicative budget breakdown per year

Year	2016	2017	2018	2019	Total
Amount (%)	2.00 %	25.00 %	40.00 %	33.00 %	100.00 %
Budget (€)	6,315.00	78,937.50	126,300.00	104,197.50	315,750.00

Work Plan Per Work Packages - WorkPackage 5 (Implementation Work Package)

Title	Smart Space - social program
Start Date	15/05/2017
End Date	15/02/2019
Budget	234,096.10

Partners Involvement

Responsible Partner	PP5 - Università degli Studi di Milano – Bicocca
Involved Partners	PP1 - Comune di Rho PP5 - Università degli Studi di Milano – Bicocca
Summary	The aim of the WP is to exploit the physical space made available in OWEIS, empowering it with a smart, cloud-based platform, aiming at the improvement of the quality of social relations and life for all citizens and, in particular, for the elderly and frail people at a local level. Senior citizens now constitute the 22% of EU population, a steadily growing percentage. They have difficulties in using digital technologies, therefore run the risk of being excluded from the advantages of the new digital communication and socialization means. The challenge is to build an infrastructure which will help personal communication, provide an easy access to services and realize some safety functions, while being extremely easy to use, respectful and non intrusive. We want also to encourage the development of a cooperative model, in which private and public service and non-profit organization may work together in a synergistic way to provide services for social and physical wellbeing of the citizens, in particularly the elderly and frail people to increase environmental awareness and social inclusion. A much easier access will be given to specific information and virtual communities, safety and security services, special transportation, shopping services and so on. The data collected by the platform will give a better understanding of the community needs and help improving the services.

Activities, Deliverables and Outputs

Activity number	Activity title	Activity description and partners involved	Start date	End date				
A 5.1	User-Centred Design for SMART SPACE – Guidelines	In this phase, the modes will be defined in which it intends to proceed to elicit and define a design oriented to the user, for the interfacing services and for proactive services. User engagement methods, informed consent, the sample size, objective measurement tools of the user agreement will be the main issues touched, all in connection with the development partners and the project manager.	Start date 15/05/2017	End date 18/06/2018				
	Deliverable number	Deliverable	Target value	Delivery date				
	D 5.1.1	<table border="1"> <tr> <td>Title</td> <td>Report</td> </tr> <tr> <td>Description</td> <td>User-Centred Design for SMART SPACE – Guidelines will be created</td> </tr> </table>	Title	Report	Description	User-Centred Design for SMART SPACE – Guidelines will be created	Target value 1	Delivery date 15/09/2017
Title	Report							
Description	User-Centred Design for SMART SPACE – Guidelines will be created							
	D 5.1.2	<table border="1"> <tr> <td>Title</td> <td>Architecture definition</td> </tr> <tr> <td>Description</td> <td>In this phase we will define the ways in which they will proceed to the determination of an architecture useful confronting the software development partners. Architectures to the state will be compared and proposals with respect to ad hoc solutions, favoring the lower-cost, but applying to different situations. This phase will also define the best use of technology for user interaction, such as smartphones / tablets, sensors, wearables favoring low-cost resources and low obsolescence</td> </tr> </table>	Title	Architecture definition	Description	In this phase we will define the ways in which they will proceed to the determination of an architecture useful confronting the software development partners. Architectures to the state will be compared and proposals with respect to ad hoc solutions, favoring the lower-cost, but applying to different situations. This phase will also define the best use of technology for user interaction, such as smartphones / tablets, sensors, wearables favoring low-cost resources and low obsolescence	Target value 1	Delivery date 15/09/2017
Title	Architecture definition							
Description	In this phase we will define the ways in which they will proceed to the determination of an architecture useful confronting the software development partners. Architectures to the state will be compared and proposals with respect to ad hoc solutions, favoring the lower-cost, but applying to different situations. This phase will also define the best use of technology for user interaction, such as smartphones / tablets, sensors, wearables favoring low-cost resources and low obsolescence							
	D 5.1.3	<table border="1"> <tr> <td>Title</td> <td>Service Specifications</td> </tr> <tr> <td>Description</td> <td>efinition of services that OWEIS aims to offer users and relationships with the architectural choices: activities carried out with the software development partners and the project manager.</td> </tr> </table>	Title	Service Specifications	Description	efinition of services that OWEIS aims to offer users and relationships with the architectural choices: activities carried out with the software development partners and the project manager.	Target value 1	Delivery date 15/09/2017
Title	Service Specifications							
Description	efinition of services that OWEIS aims to offer users and relationships with the architectural choices: activities carried out with the software development partners and the project manager.							
	D 5.1.4	<table border="1"> <tr> <td>Title</td> <td>Algorithm description and implementation</td> </tr> <tr> <td>Description</td> <td>Methods for movements/cognitive detection and for ergonomic interaction beta version: definition of implementation of the research methods and test of the algorithm for the determination of critical situations for frail people, and the definition and implementation of the methods useful for the creation of an evolved interface for elderly users or digital excluded, in laboratory tests on a restricted group target users by following the principles user centered.</td> </tr> </table>	Title	Algorithm description and implementation	Description	Methods for movements/cognitive detection and for ergonomic interaction beta version: definition of implementation of the research methods and test of the algorithm for the determination of critical situations for frail people, and the definition and implementation of the methods useful for the creation of an evolved interface for elderly users or digital excluded, in laboratory tests on a restricted group target users by following the principles user centered.	Target value 3	Delivery date 18/06/2018
Title	Algorithm description and implementation							
Description	Methods for movements/cognitive detection and for ergonomic interaction beta version: definition of implementation of the research methods and test of the algorithm for the determination of critical situations for frail people, and the definition and implementation of the methods useful for the creation of an evolved interface for elderly users or digital excluded, in laboratory tests on a restricted group target users by following the principles user centered.							
	D 5.1.5	<table border="1"> <tr> <td>Title</td> <td>Report of Technology Transfer</td> </tr> <tr> <td>Description</td> <td>Transfer of knowledge and results of the activities defined in the D5.1.4 technology partner, in relation to the architectural and technological choices for the purpose of a pilot development enabling the study and the reactions of the target group</td> </tr> </table>	Title	Report of Technology Transfer	Description	Transfer of knowledge and results of the activities defined in the D5.1.4 technology partner, in relation to the architectural and technological choices for the purpose of a pilot development enabling the study and the reactions of the target group	Target value 1	Delivery date 18/06/2018
Title	Report of Technology Transfer							
Description	Transfer of knowledge and results of the activities defined in the D5.1.4 technology partner, in relation to the architectural and technological choices for the purpose of a pilot development enabling the study and the reactions of the target group							

Activity number	Activity title	Activity description and partners involved	Start date	End date
A 5.2	Development	Develop of prototype system	19/06/2018	15/02/2019
Deliverable number	Deliverable	Target value	Delivery date	
D 5.2.1	<p>Title: Prototype release</p> <p>Description: Development of a prototype in the alpha release by the development partners that allows the study and the reactions on a target group of sufficiently large users.</p>	1	15/01/2019	
D 5.2.2	<p>Title: Pilot Test - Report</p> <p>Description: For the interaction design we will use performance metrics such as the SUMI to measure interface usability in pilot tests. From the social point of view, we will ask users to indicate, in the primary phases and then in the final pilots, to fulfil part of the EQ-5D application, which is normally used to measure the social outcomes. The EQ-D5 will be eventually partially automated. A post facto analysis will be done using e.g. GDS and MMSI questionnaires</p>	1	15/01/2019	
D 5.2.3	<p>Title: Redesign</p> <p>Description: Refinement of the solution on the basis of the results obtained in the pilot, any retouching or redefinition of the interface and really effective services to social objectives and purposes of service and growth of awareness SMART SPACE</p>	1	15/01/2019	
D 5.2.4	<p>Title: Release of 1.0</p> <p>Description: Based on the feedback obtained by the user debugging, the corrections and errors will start the release of 1.0</p>	1	15/02/2019	
Output Number	Project output	Target value	Delivery date	

Work Package Budget

PP1 - Comune di Rho	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	Support to develop ICT public procurement	N/A		Public procurement to Support the ICT development and ctivities				
Amount (€)	10,000	1,500	0	90,000	0	101,500	0	101,500
PP5 - Università degli Studi di Milano – Bicocca	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Sub-total	Revenues	Total
Description	Full time research grant holders, 1 prof ordinary 15 days per year, 1 researcher indefinitely 15 days per year (WP3+WP5)	N/A	Travel to support SMART SPACE action	University external service (5%)	Sensors wearables, tablets and laptops for the development of the solution to support the big data management and the social research			
Amount (€)	90,014	13,502	10,000	10,080	9,000	132,596	0	132,596
Total (€)	100,014	15,002	10,000	100,080	9,000	234,096	0	234,096

Indicative budget breakdown per year					
Year	2016	2017	2018	2019	Total
Amount (%)	0.00 %	20.00 %	50.00 %	30.00 %	100.00 %
Budget (€)	0.00	46,819.22	117,048.05	70,228.83	234,096.10

Work Plan Per Work Packages - WorkPackage 6 (Investment Work Package)

Title	Valorization of Organic waste and the Construction Redevelopment
Start Date	01/11/2016
End Date	04/07/2019
Budget	4,716,675.00

Partners Involvement

Responsible Partner	PP7 - SES ASA ENGINEERING srl
Involved Partners	PP1 - Comune di Rho PP2 - SES Enser Engineering srl PP6 - Dipartimento di Design - Politecnico di Milano PP7 - SES ASA ENGINEERING srl

Summary

THE PW investment will see the development of three activities:

1. The construction of an anaerobic digester functioning with liquid technology to support three condominiums with about 120 families
2. The construction of an anaerobic digester with solid technology to support the electric company and the companies Ho.Re.Ca.
3. The building redevelopment in condos of action 1

The work scope will be to enhance the organic anthropic to create energy and show how the walls and the roofs of apartment buildings can be transformed not only in energy optimization systems, but can also become tools to create energy and generate water for non-potable uses. These actions will then have a high impact on the future production of CO2, being able to effectively conserve at least 70% of the CO2 produced to date thanks to a readily available renewable source. These renewable raw materials have the advantage of fighting the greenhouse gases generated by fossil fuel sources with a solution "0 Km", allowing to the district not only to save the energy that the city would have to buy, but also save on logistics transfer for wastes. The first action will be the digester MICRO, less challenging as costs and subject to a limited number of contracts compared to the activities 2 and 3. The other actions will start simultaneously with the aim to complete its work by the end of the second year, so we have 2019 as a comprehensive scientific basis for analysis

Justification

OWEIS born as miniaturization of systems that cover the needs of large urban centers and the idea of making environmentally active urban structures. OWEIS allows municipalities to reduce greenhouse gas emissions with the use of waste, producing energy with a renewable resource difficult to exploit by small municipalities. The miniaturized solution also overcomes the logistical difficulties due to transport of waste, perfect for small municipalities like those of UIA projects. The enhancement of the building redevelopment allows to increase the environmental benefit allowing condos to better manage the resources for maintenance and to develop social projects for the most disadvantaged people. The benefits of the project are available to:

- The municipalities that save energy level and improve the level of CO2 produced;
- The municipal utilities that get benefits in lower logistics commitments also getting an economic return collaborating with the project;
- Citizens who will improve both the environment and their economic and social situation.

OWEIS uses innovative technologies but easily replicated in any European city, allowing citizens to be active and interested in the energy cycle. The OWEIS academic research will allow to monitor these aspects effectively giving an indication to the transferability of the project. The modularity allows OWEIS verify the effectiveness of the transferability according to the technical and economic capacities of the municipalities concerned.

Work Package Budget

PP1 - Comune di Rho	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Infrastructure and works	Sub-total	Revenues	Total
Description	Staff cost to create and support the public procurement activities Cost is rounded off without inflation forecast	N/A	No travel for this wp	Public procurement to gain support and patent to create the MINI Digester	No Equipment needed	Work in Public procurement		No revenues	
I 6.1	5,000	750	0	0	0	100,000	105,750	0	105,750
I 6.2	16,000	2,400	0	180,000	0	1,300,000	1,498,400	0	1,498,400
I 6.3	9,000	1,350	0	0	0	700,000	710,350	0	710,350
Partner total (€)	30,000	4,500	0	180,000	0	2,100,000	2,314,500	0	2,314,500
PP2 - SES Enser Engineering srl	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Infrastructure and works	Sub-total	Revenues	Total
Description	N/A	N/A	no	no	No Equipment needed	Develop of Digester		no	
I 6.1	60,000	9,000	0	0	0	300,000	369,000	0	369,000

PP2 - SES Enser Engineering srl	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Infrastructure and works	Sub-total	Revenues	Total
I.6.3	0	0	0	0	0	0	0	0	0
Partner total (€)	60,000	9,000	0	0	0	300,000	369,000	0	369,000
PP6 - Dipartimento di Design - Politecnico di Milano	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Infrastructure and works	Sub-total	Revenues	Total
Description	Support to the design of the digester. Cost is rounded off without inflation forecast	N/A	no	no	No Equipment needed	no		no	
I.6.1	10,000	1,500	0	0	0	0	11,500	0	11,500
I.6.2	20,000	3,000	0	0	0	0	23,000	0	23,000
I.6.3	30,000	4,500	0	0	0	0	34,500	0	34,500
Partner total (€)	60,000	9,000	0	0	0	0	69,000	0	69,000
PP7 - SES ASA ENGINEERING srl	Staff costs	Office and administration	Travel and accommodation	External expertise and services	Equipment	Infrastructure and works	Sub-total	Revenues	Total
Description	Cost of Senior and engineers to support the project. Cost is rounded off without inflation forecast	N/A	no	Technical consultancy of the Mr Lavanga patents for MICRO digester, poppy roof and system of building redevelopment	Equipment to support the creation of I.6.1 AND I.6.3 as crane/overhead crane	Develop of Micro Digester - security system and building redevelopment		no	
I.6.1	134,500	20,175	0	50,000	20,000	180,000	404,675	0	404,675
I.6.2	0	0	0	0	0	0	0	0	0
I.6.3	330,000	49,500	0	100,000	30,000	1,050,000	1,559,500	0	1,559,500
Partner total (€)	464,500	69,675	0	150,000	50,000	1,230,000	1,964,175	0	1,964,175
Total (€)	614,500	92,175	0	330,000	50,000	3,630,000	4,716,675	0	4,716,675

Indicative budget breakdown per year

Year	2016	2017	2018	2019	Total
Amount (%)	5.00 %	50.00 %	30.00 %	15.00 %	100.00 %
Budget (€)	235,833.75	2,358,337.50	1,415,002.50	707,501.25	4,716,675.00

Investment 1

Title	Micro Anaerobic Digester
Investment Description	<p>The construction of anaerobic digestion and by-products management systems includes: design, earth moving, construction works, electromechanical works (management of digestive compartments and pre-separation of the products), product promotion in co-generation asset (supplemented by quotas to a sustainable mobility, biomethane or electric), enhancement products for agronomic / horticultural processes. The system is a pilot project to develop in small urban areas a system that values the waste on site with the chemical and legal support of partners OWEIS.</p> <p>The MICRO system needs garbage disposal units (garburators) installed in the apartments to be put in touch with the MICRO digester through pipes. The digester is made from a pre-treatment bath, a pasteurisation or other equivalent sanitisation system, a digester and a cogenerator</p> <p>MICRO anaerobic digester is the little core of the project wich aims to be the basis of future technology transfer projects. At the bottom a table of environmental economic output described in the work project. With 5 q organic/ day, they produce: - € 20,000 / year (electricity), - € 20,000 / year (heat), - € 17,000 / year (land reclamation avoided for 200 t / year), - With potential business income of CO2 and NPK started to specific production processes.</p>
Involved Partners	PP 1 - Comune di Rho PP 2 - SES Enser Engineering srl PP 6 - Dipartimento di Design - Politecnico di Milano PP 7 - SES ASA ENGINEERING srl

Locations of investment

Number	Country	NUTS 2 level	NUTS 3 level
1	ITALY	Lombardia	Milano

Investment Risk	The smaller food heatsink will be built in public procurement. They will be included in the apartments to support the process of MICRO digester. The public procurement could lead to delays in the work. To overcome such problems will develop agreements with partner companies to comply with the timing of the project.
Investment Documentation	<p>MICRO Anaerobic digester needs of installation of "garburators" in the apartments to function properly. The laws that constrain these instruments are: art. 107, subsection III T.U.A., D.Lg. no. 152/2006, and 30/12/2008 n. 210</p> <p>Micro Anaerobic digester needs to follow the "building permit"/"il permesso di costruire", which is governed by Presidential Decree June 6, 2001, n. 380 and The certified signaling login (SCIA - "segnalazione certificata di inizio attività") was introduced in Italy by law 30 July 2010 n. 122, entered into force on 31 July 2010.</p>
Ownership	The area of Via Balzarotti condominiums and Via Rosselli will be the development zone of the MICRO digester. The ownership of the condos and of the area is the town of Rho which will retain ownership to the end of the project assuming the maintenance. The Municipality of Rho will be supported in the maintenance of condominiums respecting the rules of the Civil Code

Activities, Deliverables and Output. (=investment)

Activity number	Activity title	Activity description and partners involved	Start date	End date
A 6.1	MICRO Digester	Creation of a Micro digester with liquid technology which supports 110 families in the creation of heat and electricity from their own organic waste	Start date 01/12/2016	End date 07/11/2017
	Deliverable number	Deliverable	Target value	Delivery date
	D 6.1.1	<p>Title Micro Digester</p> <p>Description The digester is built with a standard tub in vibrated concrete, divided in three different sectors, realizing the linear hydraulic path required to the waste decomposition. Between the compartment 1 & 2 is implemented a partial recirculation, the rest goes into the compartment 3, where it involves a separation of digestate, arranging the collection of three different liquid fertilizer, using 3 dedicated pumps. The electric and thermal energy produced will pass to the flats through the generators</p>	Target value 1	Delivery date 07/11/2017
	D 6.1.2	<p>Title Support activities</p> <p>Description - Installation of "garburators" in all the apartments (target value 120) There will be a public procurement to manage as a single installation all the "garburators", thus to save both the works and on the purchase of products - creation of the pasteurisation system - Installation of a cogenerator</p>	Target value 123	Delivery date 07/11/2017
	Output Number	Project output	Target value	Delivery date
	O 6.1.1	<p>Title Creation of a Micro Anaerobic Digester</p> <p>Description Creation of a Micro Anaerobic Digester The cost of SES Enser of 300.000 Euro was onlin for the creation of main structure. The "garburators" and other cost of the involved partners are to cover: technical consulting and design installation all the "garburators" (in public procurement), creation of the pasteurisation system and cost of the cogenerator</p>	Target value 1	Delivery date 18/10/2017

Investment 2

Title	MINI Anaerobic Digester
Investment Description	<p>The Mini Anaerobic digester will serve the project to show the capabilities of the solid technology to support municipalities and industries linked to the "Ho.Re.Ca.". The system allows to create energy from cuttings and municipal pruning (about 800 tonnes per year to be enhanced) with solid waste from linked to "Ho.Re.Ca." (about 1,200 tons). The amount of waste is not fixed: the system will use a fork of organic substrates of the territory between 1500 and 3500 tons due to the peculiarities of individual waste to produce energy (eg: 1 ton of mixed leaves produces 280 m3 of biogas, while 1 ton of biscuits waste can produce up to 730 m3)</p> <p>The technology allows to exploit almost all the industrial waste already knowing from the early months, thanks to the system of analysis that will be performed by PP4, the environmental and economic return that will be generated by the system.</p> <p>The MINI system is part of the process of miniaturization because it is thought to support the municipalities and companies exploiting the solid waste of "5000 inhabitants equivalent" with an output of 100 kW.</p> <p>The Mini System is covered as the MICRO, utilization of waste to "Km 0" in order to streamline the logistics partially linked to waste, enabling to generate on-site electricity and heat starting from the waste.</p> <p>The investment will be supported by PP3 and PP4 for chemical analysis and legal management of the output of the system, with the aim to scientifically validate the benefits of the system</p>
Involved Partners	<p>PP 1 - Comune di Rho PP 6 - Dipartimento di Design - Politecnico di Milano PP 7 - SES ASA ENGINEERING srl</p>

Locations of investment

Number	Country	NUTS 2 level	NUTS 3 level
1	ITALY	Lombardia	Milano

Investment Risk	<p>OWEIS will need the skills acquisition / patents for the development of the digester solid technology. These skills are easily found in Italy, Germany and Switzerland, although they have so far not had a commercial development worth noting.</p> <p>The MINI system will be developed entirely in agreement making under this point of view the system more attractive from the point of view of the results but more related to the risk of not being totally supported in the operational development.</p> <p>OWEIS consulted companies producing biogas and technical experts of the systems in order to support the Municipality of Rho to prepare the specifications to be included in future public procurements</p>
Investment Documentation	<p>MINI Anaerobic digester needs to follow the "building permit"/"il permesso di costruire", which is governed by Presidential Decree June 6, 2001, n. 380 and The certified signaling login (SCIA - "segnalazione certificata di inizio attività") was introduced in Italy by law 30 July 2010 n. 122, entered into force on 31 July 2010.</p> <p>The system needs to respect also the laws that constrain digesters: art. 107, subsection III T.U.A., D.Lg. no. 152/2006, and following 30/12/2008 n. 210. Those laws are designed to big systems that are different for logistic and processes from Mini Anaerobic digester</p>
Ownership	<p>Industrial area of street "Risorgimento" is the goal of the investment area. It is owned by the City of Rho. The ownership of the project and the area will remain in Rho with the Municipal NED that will handle maintenance by managing the structure supporting the main current in the site</p>

Activities, Deliverables and Output. (=investment)

Activity number	Activity title	Activity description and partners involved	Start date	End date
A 6.2	Mini anaerobic digester	Creation of Mini anaerobic digester to solid technology. The system in its entirety is spread in an area occupied indicative around 2,000 m2 comfortable, taking into account the room for maneuver, storage and masking. The investment involves the total resolution of the territorial problem SDA / VEP - Waste, Water, Environment / Clean Energy Enhancement: Local workforce Disposal; Adaptation to the regulations in terms of environmental / Enhancement for Sustainable Territory economy impact	Start date 01/11/2016	End date 10/12/2018
Deliverable number	Deliverable		Target value	Delivery date
D 6.2.1	Title	The anaerobic fermentation "solid" - MINI DIGESTER	Target value 1	Delivery date 11/09/2018
	Description	The controlled fermentation system of static digesters in which the organic substrates are stored for the required retention time to the extraction of the whole methanogenic potential available		
D 6.2.2	Title	Cogeneration	Target value 1	Delivery date 18/09/2018
	Description	Here a general description of the components and installation tasks: Containers with custom-designed fixtures Generation Group to complete Biogas engine, generator and accessories Control panel generation unit Framework distribution and automation SW and HD Engineering Assembly assistance Commissioning		
D 6.2.3	Title	The connections and the preparation for the exploitation of thermal energy	Target value 1	Delivery date 30/09/2018
	Description	the plant connections will be designed for the maximum utilization of the available thermal net of internal consumption (about 80% of available heat energy, equivalent to about 800,000 kwhter).		
D 6.2.4	Title	Shredded and Separation System	Target value 1	Delivery date 18/09/2018
	Description	The system is composed of load tank to mechanical pressure to the pre-treatment before the digester: • biowaste • packaged foods • Mowing and pruning with woody inclusions System will be designed for the separation and elimination, management flow, the aggregates contained in the organic fraction of waste collection and packaging of organic food expired products from supermarkets		
Output Number	Project output		Target value	Delivery date
O 6.2.1	Title	Mini Anaerobic Digester connected	Target value 1	Delivery date 10/12/2018
	Description	Installation and testing of the Mini Anaerobic digester		

Investment 3

Title	Building Redevelopment and Poppy Roof
Investment Description	<p>OWEIS split, for the intervention of condominium redevelopment, a first phase of functional and detailed design that addresses the objectives pursued. It will follow the development of their respective specifications and appropriate tenders. Among the strategic assets there is security, which will pay particular attention to the co-presence of the inhabitants, on the lines of L 81/08.</p> <p>The commissioning of the site security is a precondition for the beginning and preparation of enclosures (walls and roofs) to receive the artifacts in the project: frames, thermal coats absorber, tensile structures for innovative roofing and related planning areas.</p> <p>Near the end they activate the earth and fitting movement operations for interventions that provide new management of water, waste water, wet, equipment rooms and interfacing to hydraulic systems, electrical and thermal, with modest interventions inside the mansion (sinks cooking and temperature control, as per the law). All this will be completed by the decorative greenery arrangement and dismantling yard.</p> <p>OWEIS will execute the system's settlement interventions MINI, subservient to the neighborhood (Industrial Area), according to customary practices and regulations for plant sites.</p> <p>The interventions will be monitoring and publishing, hosting committees and professional references of studies and universities involved. The use of social activation and training measures developed will complete OWEIS</p>
Involved Partners	<p>PP 1 - Comune di Rho PP 2 - SES Enser Engineering srl PP 6 - Dipartimento di Design - Politecnico di Milano PP 7 - SES ASA ENGINEERING srl</p>

Locations of investment

Number	Country	NUTS 2 level	NUTS 3 level
1	ITALY	Lombardia	Milano

Investment Risk	<p>OWEIS developed this section of the project to overcome cultural resistance related to environmental efficiency and the exploitation of the systems. On technological fronts, they predict a less critical, if not those of systemic (each component is supported by the experiences of prominent consolidated and professional know how), compared to which it reacts with high index of organization, time and methods, on which you invest profusely. OWEIS predisposes the maximum warning of a health guarantee institutions (human, animal and environmental) in the development of two programs in the area contacting the Fire Department and local health authorities, both in charge to ensure that the measure is compatible with their ability to cope the relevant interventions. One of the problems of this investment will be the executive management through tenders. PMB will design and will make sure to make optimal both the Calls that the supervision of the work</p>
Investment Documentation	<p>This investment needs to follow the "building permit"/"il permesso di costruire", which is governed by Presidential Decree June 6, 2001, n. 380 and The certified signaling login (SCIA - "segnalazione certificata di inizio attività") was introduced in Italy by law 30 July 2010 n. 122, entered into force on 31 July 2010.</p> <p>OWEIS has already launched specific impediments audits against established rules, both with respect to building regulations that flow management, waste, water, energy (thermal and electrical) with the respective operator, finding the general consensus to the objective pursued and that the rules are open to the whole proposed innovations, though bold.</p> <p>The actions proposed, making use of technological solutions, evaluated also by means of studies on university theses, already strong of industrial applicability requirements, creativity and innovation on the part of UIBM (Italian Patent and Trademark Office) of MISE (Ministry of Economic Development), identified by the following codes</p> <p>CMTC - MI2014A002106 - thermal capture system and a specific visible radiation spectrum, conducted with lenses and optical fibers to targeted consumers, with stratigraphy in developing parabolic</p> <p>TCC - MI2013U000077- "Thermo coat absorber"</p> <p>MI2013U000148 – thermo pit</p>
Ownership	<p>The area of Via Balzarotti condominiums and Via Rosselli will be the development zone of the "Building Redevelopment and Poppy Roof" investment. The ownership of the condos and of the area is the town of Rho which will retain ownership to the end of the project assuming the maintenance.</p>

Activities, Deliverables and Output. (=investment)

Activity number	Activity title	Activity description and partners involved	Start date	End date
A 6.3	Building Redevelopment and Poppy Roof	Creation of Building Redevelopment and Poppy Roof	Start date 05/03/2017	End date 04/07/2019
	Deliverable number	Deliverable	Target value	Delivery date
		Title		
	D 6.3.1	Building Redevelopment		
		Description	Target value 1	Delivery date 04/06/2018
		Creation of Building Redevelopment activities: with a termo coat absorber constituted by a first layer created by embossed sheaths that hinder the convective motions, supplemented by the insulating layer, followed by a second layer consisting of a corrugated sheet (with intrados towards the inside, with a tube inside the Greek containing the heat carrier, the sheet constitutes a micro-concentrator of thermal energy around the tube, facilitating the exchange functions) and an outer plaster		
		Title		
	D 6.3.2	Poppy Roof		
		Description	Target value 1	Delivery date 18/06/2019
		Reorganization roofs, with the removal of the existing and the construction of a marquee for "poppy roof", that is a reverse paraboloid comprising a "sandwich" panel polyurethane, pipes, rolling (in anchorage zones reserved for photovoltaic), colors or pictograms will be functional to the aims pursued. The tensile structure will also be support for connectivity devices and lenticular systems used to receive and convey the radiation spectrum wanted		
		Title		
	D 6.3.3	Building Social Redevelopment		
		Description	Target value 1	Delivery date 13/03/2018
		Action to build gentle care solution in accord to citizen and PP5: - architectural barriers (Law 13/89) - Elevators and home automation services - social spaces (nursery for Children / Oldery; ecological Laundry)		
	Output Number	Project output	Target value	Delivery date
		Title		
	O 6.3.1	Building Redevelopment and Poppy Roof		
		Description	Target value 1	Delivery date 04/03/2019
		Creation of Building Redevelopment and Poppy Roof :It allows to select a radiative mix resorting to the elementary reflection and intercept all the rest converting the spectrum into heat. The expanded metal mesh structure also improves the interception of environmental energy (hydro-thermal), to the heat exchanger that makes it available to the heat transfer that conveys to the user. It provides high heat output in relation to the engaged unit area		

Work Plan Per Work Packages - WorkPackage 7 (Closure and knowledge transfer work package)

Title	Closure and knowledge transfer
Start Date	02/11/2019
End Date	01/11/2020
Budget	15,000.00

Partners Involvement

Responsible Partner	PP1 - Comune di Rho
Involved Partners	PP1 - Comune di Rho
Summary	<p>OWEIS will pay attention to the advice of UIA experts to develop this WP. It will also be carried out a prospective analysis of the economic benefits over the next 10 years from the end of the project on the basis of real technical and scientific data. Knowledge transfer will see a report that considers not only the specifics of the project, but also the municipalities that hosted the project itself and possible cases that may occur in Europe. The goal will be to create a grid in the qualitative reports that allows to insert the transfer according to the locations on the one hand and with the other technology transfer.</p> <p>For sites that will be carried out:</p> <p>A. Brief socio economic and environmental analysis of Rho and Italy B. The economic and cultural analysis of the regions (developed, developing and poor) to understand how to modulate the more efficient provision at the macro level) C. Study of Municipalities (under 50,000 inhabitants, agglomerations of municipalities and municipalities over 50 thousand inhabitants)</p> <p>For technology transfer:</p> <ol style="list-style-type: none"> Transfer of the project as a copy of OWEIS Partial Transfer of the Project on the advice of the above point B and C according to the following scheme: <ul style="list-style-type: none"> - Transfer of one or more of the sections of the project - Modular transfer of one or more sections deploying the importance and the budget according to directions of the new municipalities Using local resources or European or even partial competences of the project team

Activities and Deliverables

Activity number	Activity title	Activity description and partners involved	Start date	End date				
A 7.1	Transfer of knowledge activities	<ul style="list-style-type: none"> Drafting and submission of the final qualitative report Participation to Urban Development Network (UDN) Project evaluation with UIA Experts 	02/11/2019	01/11/2020				
	Deliverable number	Deliverable	Target value	Delivery date				
	D 7.1.1	<table border="1"> <tr> <td>Title</td> <td>Final qualitative report</td> </tr> <tr> <td>Description</td> <td>Final qualitative report</td> </tr> </table>	Title	Final qualitative report	Description	Final qualitative report	1	01/11/2020
Title	Final qualitative report							
Description	Final qualitative report							
A 7.2	Administrative closure	Preparation and submission of final progress report	02/11/2019	02/02/2020				
	Deliverable number	Deliverable	Target value	Delivery date				
	D 7.2.1	<table border="1"> <tr> <td>Title</td> <td>Final progress report</td> </tr> <tr> <td>Description</td> <td>Final progress report</td> </tr> </table>	Title	Final progress report	Description	Final progress report	1	02/02/2020
Title	Final progress report							
Description	Final progress report							

Work Package Budget

Partner name	Staff cost (€)	Office and administration (€)	Travel and accommodation (€)	External expertise and services (€)	Equipment (€)	Infrastructure and construction works (€)	Sub-Total (€)	Revenues (€)	Total (€)
Comune di Rho	0.00	0.00	0.00	15,000.00	0.00	0.00	0.00	0.00	15,000.00

Part E - Project Budget
E.1 Project Budget Co-Financing Source (Fund) - Breakdown per Partner

Partner		ERDF co-financing		Contribution			Total	
Partner	Country	EUR	ERDF rate	Public	Private	Total	Budget	% of project budget
PP 1	IT	2,276,800.00	80.00 %	569,200.00	0.00	569,200.00	2,846,000.00	45.54 %
PP 2	IT	349,320.00	80.00 %	0.00	87,330.00	87,330.00	436,650.00	6.99 %
PP 3	IT	159,800.00	80.00 %	39,640.00	0.00	39,640.00	199,750.00	3.20 %
PP 4	IT	161,200.00	80.00 %	40,300.00	0.00	40,300.00	201,500.00	3.22 %
PP 5	IT	160,896.88	80.00 %	40,224.22	0.00	40,224.22	201,121.10	3.22 %
PP 6	IT	146,000.00	80.00 %	36,500.00	0.00	36,500.00	182,500.00	2.92 %
PP 7	IT	1,745,740.00	80.00 %	0.00	436,435.00	436,435.00	2,182,175.00	34.92 %
Total (€)		4,999,756.88	80.00 %	725,864.22	523,765.00	1,249,629.22	6,249,696.10	100.00 %

E.2 Project Budget - Overview per Partner/ per Period

Partner	Preparation (Period 0)	Jan - Dec 2016	Jan - Dec 2017	Jan - Dec 2018	Jan - Dec 2019	Closure	Total
PP 1	20,000.00	145,180.00	1,321,200.00	870,775.00	473,845.00	15,000.00	2,846,000.00
PP 2	0.00	22,201.50	207,255.00	133,147.50	74,046.00	0.00	436,650.00
PP 3	0.00	7,713.50	57,892.50	74,072.50	60,071.50	0.00	199,750.00
PP 4	0.00	4,950.00	52,100.00	79,450.00	65,000.00	0.00	201,500.00
PP 5	0.00	3,625.50	49,319.22	89,160.55	59,015.83	0.00	201,121.10
PP 6	0.00	8,465.00	70,850.00	59,275.00	43,910.00	0.00	182,500.00
PP 7	0.00	111,958.75	1,057,787.50	660,402.50	352,026.25	0.00	2,182,175.00
Total (€)	20,000.00	304,094.25	2,816,404.22	1,966,283.05	1,127,914.58	15,000.00	6,249,696.10
% of total budget	0.32 %	4.87 %	45.06 %	31.46 %	18.05 %	0.24 %	100.00 %

E.3 Project Budget - Overview per Partner/ per Work Package

Partner	Preparation (WP 1)	WP 2	WP 3	WP 4	WP 5	WP 6	Closure (WP 7)	Total
PP 1	20,000.00	251,500.00	143,500.00	0.00	101,500.00	2,314,500.00	15,000.00	2,846,000.00
PP 2	0.00	24,600.00	43,050.00	0.00	0.00	369,000.00	0.00	436,650.00
PP 3	0.00	42,550.00	31,450.00	125,750.00	0.00	0.00	0.00	199,750.00
PP 4	0.00	11,500.00	0.00	190,000.00	0.00	0.00	0.00	201,500.00
PP 5	0.00	22,425.00	46,100.00	0.00	132,596.10	0.00	0.00	201,121.10
PP 6	0.00	23,000.00	90,500.00	0.00	0.00	69,000.00	0.00	182,500.00
PP 7	0.00	103,000.00	115,000.00	0.00	0.00	1,964,175.00	0.00	2,182,175.00
Total (€)	20,000.00	478,575.00	469,600.00	315,750.00	234,096.10	4,716,675.00	15,000.00	6,249,696.10
% of total budget	0.32 %	7.66 %	7.51 %	5.05 %	3.75 %	75.47 %	0.24 %	100.00 %

E.4 Project Budget - Overview per Work Package/ per Period

Work Package	Preparation	Jan - Dec 2016	Jan - Dec 2017	Jan - Dec 2018	Jan - Dec 2019	Closure	Total
WP 1	20,000.00						20,000.00
WP 2		47,857.50	191,430.00	143,572.50	95,715.00		478,575.00
WP 3		14,088.00	140,880.00	164,360.00	150,272.00		469,600.00
WP 4		6,315.00	78,937.50	126,300.00	104,197.50		315,750.00
WP 5		0.00	46,819.22	117,048.05	70,228.83		234,096.10
WP 6		235,833.75	2,358,337.50	1,415,002.50	707,501.25		4,716,675.00
WP 7						15,000.00	15,000.00
Total (€)	20,000.00	304,094.25	2,816,404.22	1,966,283.05	1,127,914.58	15,000.00	6,249,696.10
% of total budget	0.32 %	4.87 %	45.06 %	31.46 %	18.05 %	0.24 %	100.00 %

E.5 Project Budget - Overview per Partner/ per Budget Line

Partner	Staff	Office and administration	Travel and accommodation	External expertise and services	Equipment	Infrastructure and construction works	Sub-total	Revenues	Total
PP 1	300,000.00	45,000.00	16,000.00	385,000.00	0.00	2,100,000.00	2,846,000.00	0.00	2,846,000.00
PP 2	71,000.00	10,650.00	0.00	55,000.00	0.00	300,000.00	436,650.00	0.00	436,650.00
PP 3	165,000.00	24,750.00	10,000.00	0.00	0.00	0.00	199,750.00	0.00	199,750.00
PP 4	170,000.00	25,500.00	6,000.00	0.00	0.00	0.00	201,500.00	0.00	201,500.00
PP 5	143,514.00	21,527.10	17,000.00	10,080.00	9,000.00	0.00	201,121.10	0.00	201,121.10
PP 6	150,000.00	22,500.00	10,000.00	0.00	0.00	0.00	182,500.00	0.00	182,500.00
PP 7	504,500.00	75,675.00	12,000.00	310,000.00	50,000.00	1,230,000.00	2,182,175.00	0.00	2,182,175.00
Total (€)	1,504,014.00	225,602.10	71,000.00	760,080.00	59,000.00	3,630,000.00	6,249,696.10	0.00	6,249,696.10
% of total budget	24.07 %	3.61 %	1.14 %	12.16 %	0.94 %	58.08 %	100.00 %	0.00 %	100.00 %

E.6 Project Budget - Overview per Work Package/ per Budget Line

Work Package	Staff Costs (€)	Office and administration (€)	Travel and accommodation (€)	External expertise and services (€)	Equipment (€)	Infrastructure and Works (€)	Sub-total (€)	Revenues (€)	Total (€)
WP 1	0.00	0.00	0.00	20,000.00	0.00	0.00	0.00	0.00	20,000.00
WP 2	320,500.00	48,075.00	10,000.00	100,000.00	0.00	0.00	478,575.00	0.00	478,575.00
WP 3	204,000.00	30,600.00	40,000.00	195,000.00	0.00	0.00	469,600.00	0.00	469,600.00
WP 4	265,000.00	39,750.00	11,000.00	0.00	0.00	0.00	315,750.00	0.00	315,750.00
WP 5	100,014.00	15,002.10	10,000.00	100,080.00	9,000.00	0.00	234,096.10	0.00	234,096.10
WP 6	614,500.00	92,175.00	0.00	330,000.00	50,000.00	3,630,000.00	4,716,675.00	0.00	4,716,675.00
WP 7	0.00	0.00	0.00	15,000.00	0.00	0.00	0.00	0.00	15,000.00
Total (€)	1,504,014.00	225,602.10	71,000.00	760,080.00	59,000.00	3,630,000.00	6,249,696.10	0.00	6,249,696.10
% of total budget	24.07 %	3.61 %	1.14 %	12.16 %	0.94 %	58.08 %	100.00 %	0.00 %	100.00 %

Part F - Risk Management

Description of the risk	Properties		Actions to mitigate the risk
<p>Financial problems</p> <p>Large projects may have liquidity issues or commitment, especially with "partners" who respond to public procurement</p>	Impact	Incident	<p>The partnership was created with large institutions and business realities with revenues likely to safely handle the project and its financial flows</p> <p>PMH will have a section to handle a partner's problems, including its supposed renunciation, to start processes that can develop the project following the annual timing (first year -2017- MICRO digester and social regeneration, second MINI energy improvement digester, third poppy roof)</p>
<p>Contract management: The management in procurement of various construction activities. The development of contracting activities allows for easier activities and services but with staff that does not know directly the project and that will be formed for the pilot and innovative construction</p>	Impact	Minor	<p>OWEIS will develop training papers in support of tenders. The training activities will be arranged dutifully in PMH to give more information to "prospective project partners"</p>
<p>Security management at work OWEIS will be subject to the risks of the work, starting from those of construction, among which the risk for the roof, to those related to chemical monitoring activities</p>	Impact	Minor	<p>The SES ASA and SES ENSER Partners are security experts with the development of systems and processes used for large biogas systems and structures. SES ASA will have in its staff RSPP (the Prevention and Protection Service Manager) Ms Ferro, highest office for the safety-related tasks on the job in Italy</p>
<p>Social activities management of relations with citizens. There is the risk of losing the trust and attention for the social project</p>	Impact	Incident	<p>The presentation events of Investments will be leveraged to engage and stronger relations for the social project</p>
<p>Likelihood</p>	Likelihood	Possible	

(Main) Urban Authority confirmation and signature

(Main) Urban Authority	Comune di Rho	
Budget Total	EUR	<input type="text" value="6,249,696.10"/>
ERDF co-financing	EUR	<input type="text" value="4,999,756.88"/>
ERDF co-financing rate		<input type="text" value="80.00 %"/>

By signing the application form the (Main) Urban Authority hereby confirms that:

- the Urban Authorities involved in this project proposal are not involved in other proposals submitted to the UIA Initiative as part of this current Call for Proposals;
- the project partners listed in the application form are committed to take part in the project's activities and financing;
- the (Main) Urban Authority and the project partners will act according to the provisions of the relevant national and EU legislation and policies (especially regarding structural funds, public procurement, state aid, environment and equal opportunities) as well as the specific provisions of the UIA Initiative;
- the information in the Application Form is accurate and true to the best knowledge of the (Main) Urban Authority

Forename, Surname

Date

Position

Place

Authorized signature of (Main) Urban Authority