

# **Evaluation of the MENA Region Initiative as a Model of Nexus Approach and Renewable Energy Technologies Jordan, Tunisia, Lebanon (MINARET)**

**TECHNICAL PROPOSAL**  
**SEPTEMBER 2020**

## Contents

<b>1</b>	<b>INFORMATION ON CORE BUSINESS AND YEARS IN BUSINESS .....</b>	<b>2</b>
1.1	Introduction.....	2
1.1.1	Contact Details .....	2
1.2	Presentation of EXERGIA.....	3
1.2.1	Background and Experience .....	3
1.2.2	Main Areas of Activities.....	3
1.2.3	Clients.....	8
1.2.4	Human resources capacities .....	9
1.2.5	Quality Assurance, Information Security Management and Code of Conduct	10
<b>2</b>	<b>QUALIFICATIONS IN THE FIELD OF THE ASSIGNMENT.....</b>	<b>11</b>
2.1	Consultant's Strong Points .....	11
2.2	Project References .....	12
<b>3</b>	<b>TECHNICAL AND MANAGERIAL CAPABILITIES OF THE CONSULTANT .....</b>	<b>31</b>
3.1	Technical Infrastructure .....	31
3.2	Technical Capabilities.....	32
3.3	Managerial Capabilities.....	33
<b>4</b>	<b>DESCRIPTION OF APPROACH, METHODOLOGY AND WORK PLAN .....</b>	<b>35</b>
4.1	Technical Approach and Methodology.....	35
4.1.1	Proposed Project Structure.....	35
4.1.2	TASK 0: Project Management .....	35
4.1.3	TASK 1: Inception Phase .....	36
4.1.4	TASK 2: Data collection and analysis .....	39
4.1.5	TASK 3: Drafting and Finalization of the Final Evaluation Report .....	40
4.2	Work Plan .....	43
<b>5</b>	<b>ORGANIZATION AND STAFFING .....</b>	<b>44</b>
5.1	Presentation of Project Team.....	44
5.2	Presentation of Experts.....	47

# 1 INFORMATION ON CORE BUSINESS AND YEARS IN BUSINESS

## 1.1 Introduction

In response to the invitation of the MINARET for consulting services for the Project “Provision for Consultancy Services to Conduct an End-Term Evaluation for MINARET Project”, hereinafter referred to as the Project, **EXERGIA S.A. (GR)**, hereinafter referred to as “the Consultant” is pleased to submit a Technical Proposal.

The Consultant has ensured a team of international and local-based experts with significant professional experience in **successfully completing evaluation of multi-component programs, such as ex-ante, mid-term and end-term evaluations. Furthermore, the Consultant has long-term presence in the energy and environment sectors, having completed numerous projects in these sectors, covering RES, climate change, energy efficiency, water management, Environmental Impact Assessments, etc.** The Consultant also declares that following the review of the ToR he will enrich the team of the proposed experts in order to meet the ToR’s requirements.

### 1.1.1 Contact Details

Company Name	EXERGIA Climate Change Consultants S.A.
Acronym	EXERGIA S.A.
Legal status	Private Company – Société Anonyme
VAT Number	EL 094327856
Company Address	15 Voukourestiou Str., 106 71 Athens, Greece
Tel	+30 210 699 6185
Fax	+30 210 699 6186
General e-mail	<a href="mailto:tenders@exergia.gr">tenders@exergia.gr</a>
Web page	<a href="http://www.exergia.gr">www.exergia.gr</a>
Authorized Representative	Dr. Theodor Goumas, Chief Executive Officer (CEO) (t.goumas@exergia.gr)
Contact Person for this bid	Dr. George Vlondakis, Business Development Director (g.vlondakis@exergia.gr)

## 1.2 Presentation of EXERGIA

---

### 1.2.1 Background and Experience

EXERGIA is an independent firm of consultants operating internationally in the fields of energy, environment and water. The company, founded in 1991, maintains a rapid growth rate through expansion of its client base and development of its activities. The cornerstone of EXERGIA is its highly qualified and dedicated staff with top educational background and wide professional experience. Our work is based on a decentralized organization, the application of state-of-the-art technology and a sound business attitude.

#### **Business Philosophy**

EXERGIA's philosophy is to work in partnership with the client to provide consultancy, outsourcing services and cost-effective solutions through an integrated approach. The company embraces new skills, legitimate aspirations and well-founded applied knowledge to form a coherent work-team operating in harmony with the company's spirit and completing projects on time and within budget.

#### **Client-Based Approach**

EXERGIA's approach to project implementation is based on the thorough understanding of the client requirements, mutual commitment and trust, in-depth capability to present and evaluate alternatives and the delivery of substantiated and comprehensive final results.

A client-oriented organizational structure has been established enabling the provision of energy, water and environment-related consulting and outsourcing services to various categories of clients, such as: Administration, IFIs, Industry, Utilities and Buildings.

Moreover, proven expertise in Management, Information Technology and Training underpin our interdisciplinary integrated approach.

#### **People**

EXERGIA staff includes high-calibre experts with extensive international experience. They have proven managerial skills and deep knowledge of the structure and procedures of the international organisations/donors and IFIs, as well as of the prevailing energy, water, environmental, socio-economic and policy situation worldwide.

### 1.2.2 Main Areas of Activities

The scope of the company's projects ranges from consultancy to state policy and strategy formulation up to energy/ environmental audits and studies for private clients. Experience and know-how built up over the years have made the company capable of handling a wide range of projects and guarantee a multidisciplinary approach tailored to meet the client's requirements. EXERGIA provides specialised advice, expertise and technical consultancy on the following key sectors, covering a variety of topics. The Consultant's continuous

objective is to maintain a leading position in the international market. The Consultant provides services in the following fields:

**ENERGY:**

<b>Energy Policy and Strategy</b>	<ul style="list-style-type: none"> <li>➤ Development of National and Regional Energy Policies, Strategies and Action Plans</li> <li>➤ Integrated Resource Planning</li> <li>➤ Institutional and Organizational Development of the Energy Sector</li> <li>➤ Support to harmonization with key energy related Directives</li> <li>➤ Energy Economics Analyses</li> <li>➤ Country and Sectoral Reviews</li> <li>➤ Evaluation Energy Programmes and Projects</li> <li>➤ Formulation of Energy Pricing Policies</li> <li>➤ Design of Energy Efficiency Measures</li> <li>➤ Renewable Energy Investment Policies.</li> </ul>
<b>Energy Markets</b>	<ul style="list-style-type: none"> <li>➤ Support to legal and regulatory reform</li> <li>➤ Institutional framework development</li> <li>➤ Organization and design of markets</li> <li>➤ Operational policies in competitive markets</li> <li>➤ Infrastructure development support</li> <li>➤ Development of tailor-made information tools</li> <li>➤ Auditing, analysis and evaluation of specific market cases</li> <li>➤ Training and HR development</li> <li>➤ Business development assessment.</li> </ul>
<b>Energy Efficiency</b>	<p><b>Diagnostics</b></p> <ul style="list-style-type: none"> <li>➤ Energy Metering and Control</li> <li>➤ Energy Audits</li> </ul> <p><b>Management</b></p> <ul style="list-style-type: none"> <li>➤ Energy Management Systems</li> <li>➤ Monitoring and Targeting (M&amp;T)</li> <li>➤ Energy Action Plans</li> </ul> <p><b>Investment Assessment and Support</b></p> <ul style="list-style-type: none"> <li>➤ Cost- Benefit Analysis and Optimization</li> <li>➤ Bankable Feasibility Studies</li> <li>➤ Investment Financing</li> <li>➤ Support for Applications to Ensure Financing (Development Law, Grants, etc.)</li> </ul> <p><b>Energy Technology</b></p> <ul style="list-style-type: none"> <li>➤ Industrial Energy Efficiency Solutions</li> <li>➤ Building Energy Simulations</li> <li>➤ Micro-climate Analysis</li> </ul>

	<ul style="list-style-type: none"> <li>› Combined Heat and Power (CHP)</li> <li>› Energy Supply Alternatives (Fuel Substitution, Supplier switching, etc.)</li> <li>› Best Practice Demonstrations</li> <li>› Technology Assessment and Market Analysis</li> <li>› Conceptual Design</li> <li>› Tendering and Procurement</li> <li>› Implementation and Commissioning</li> <li>› Refurbishment of Existing Systems</li> </ul> <p><b>Building Certifications</b></p> <ul style="list-style-type: none"> <li>› Licensed BREEAM Assessors</li> <li>› LEED</li> <li>› HQE</li> </ul>
<b>Renewable Energy Sources (RES) and Combined Heat and Power (CHP)</b>	<ul style="list-style-type: none"> <li>› Development of National / Regional Policies, Strategies and Plans for RES/CHP</li> <li>› Evaluation of technical and economic potential at national or regional level</li> <li>› Technical, economic and due diligence reports</li> <li>› Feasibility assessments and Business Plans</li> <li>› Technical and economic operation evaluations</li> <li>› Grid Interconnection studies</li> <li>› Environmental Impact Assessments</li> <li>› Preparation and support of application files for the acquisition of generation licenses, environmental permits, installation licenses, etc.</li> </ul>
<i>ENVIRONMENT:</i>	
<b>Environmental and Social Impact Assessment</b>	<ul style="list-style-type: none"> <li>› Identification and comparative assessment of alternatives</li> <li>› Support in selecting optimum routes and project locations</li> <li>› Environmental and social baseline studies</li> <li>› Identification and assessment of impacts</li> <li>› Drafting Environmental and Social Management and Monitoring Plans (ESMMP)</li> <li>› Drafting Public Consultation and Disclosure Plans (PCDP) and supporting the public consultation process</li> <li>› Carrying out pre-construction monitoring and baseline studies</li> <li>› Monitoring environmental and social performance of project activities against ESMMP requirements</li> <li>› ESIA-related services are supported by in-house capacity in Geographic Information Systems.</li> </ul>
<b>Environmental Policy and Strategy</b>	<ul style="list-style-type: none"> <li>› Review of national and regional environmental context</li> <li>› Transfer of EU experience and know-how</li> </ul>



	<ul style="list-style-type: none"> <li>➤ Identification, assessment and exploitation of local capacity and infrastructure</li> <li>➤ Supporting and strengthening existing institutions and administrations</li> <li>➤ Building or strengthening existing capacity</li> <li>➤ Drafting of Action Plans at regional or national level</li> <li>➤ Incorporating environmental considerations in other economic sectors</li> <li>➤ Working in partnership with society.</li> </ul>
<b>Compliance Assessments</b>	<ul style="list-style-type: none"> <li>➤ Environmental and Health and Safety (HSE) inspections at industrial plants or facilities of the services sector</li> <li>➤ Identification of potential breaches of relevant legislation</li> <li>➤ Identification of areas of improvement and provision of recommendations</li> <li>➤ Environmental due diligence exercises involved in property acquisitions, changes of ownership and public utilities privatization.</li> </ul>
<b>Waste Management</b>	<ul style="list-style-type: none"> <li>➤ Integrated management of waste streams in compliance with EU best practices</li> <li>➤ Technical assistance to national, regional and local governments in the development of waste management plans and the assessment of infrastructure needs</li> <li>➤ Capacity building to waste management officials at regional and local level</li> <li>➤ Technical assistance in the exploitation of special waste streams, i.e. agricultural waste, hazardous waste, etc.</li> <li>➤ Technical assistance to industry in managing waste streams and addressing identification, labelling, storage and eventual disposal of hazardous waste.</li> </ul>
<b>Climate Change</b>	<ul style="list-style-type: none"> <li>➤ Provision of technical assistance at governmental level for compliance with EU climate change requirements</li> <li>➤ Support to local authorities in the development and implementation of regional and local energy plans with focus on climate change mitigation through improving energy effectiveness and incorporation of RES.</li> <li>➤ Consultation to firms under the EU ETS scheme in addressing emission trading challenges and exploit the opportunities arising thereof</li> <li>➤ Development of carbon mitigation measures relevant to the use of renewable and energy efficiency increase for industry, transport and buildings sectors</li> <li>➤ Support to third countries such as Turkey and Ukraine to develop climate change policies and strategies for the exploitation of flexible mechanisms (CDM, JI) and set up of voluntary carbon markets.</li> </ul>

## WATER:

<b>Water Management</b>	<ul style="list-style-type: none"> <li>➤ Conservation of freshwater resources and protection of their quality, with emphasis on water use in industry and the services sector</li> <li>➤ Technical assistance to central, regional and local government in the development of water management plans and the assessment of infrastructure needs</li> <li>➤ Capacity building to water management officials at regional and local level</li> <li>➤ Exploitation of treated wastewater based on best practice techniques ; recording and assessment of the realistic potential of water exploitation of treated wastewater</li> <li>➤ Current practice in Mediterranean countries- review of European programmes and national initiatives related to successful technological solutions, costs, obstacles</li> <li>➤ Examination of funding possibilities by EU or national programmes</li> <li>➤ Environmental risk assessment related to water contamination by chemicals and other polluters</li> <li>➤ Market studies.</li> </ul>
<b>Feasibility Studies in the Water Sector</b>	<ul style="list-style-type: none"> <li>➤ Feasibility Studies, Conceptual/Preliminary Design for WWTPs (based on FIDIC Yellow Book), Detailed Design for Water Supply and Sewerage and Storm Water Networks (based on FIDIC Red Book) in compliance with national standards and regulations, design requirements, special requests of the Employer, and international standards and performance requirements.</li> <li>➤ Preparation of Tender Dossier – Volumes 1, 2, 3, 4, 5 for the waste water treatment facility according to the FIDIC Plant and Design – Build (Yellow Book).</li> <li>➤ Capacity building of governmental institutions and local companies, know-how transfer and on-the-job training.</li> <li>➤ Financial and Procurement support</li> <li>➤ Other technical assistance studies and services for investment projects in water and sanitation infrastructure, in compliance with the requirements of international donors.</li> </ul>
<b>Hydropower Projects</b>	<ul style="list-style-type: none"> <li>➤ Environmental Assessment of hydropower plants</li> <li>➤ Hydrological analysis of Hydro Systems</li> <li>➤ Dam water flow energy production analysis using specialised simulation models</li> <li>➤ Analysis of present situation of Small Hydropower Systems, identification of feasible potential</li> <li>➤ Financial aspects of SHPP, market potential.</li> </ul>

## HORIZONTAL ACTIVITIES:



<b>Evaluation and Monitoring</b>	<ul style="list-style-type: none"> <li>➤ Assessment of programme implementation mechanisms and of programme performance with respect to efficiency, effectiveness and impact</li> <li>➤ Evaluation of technical/ financial programme management, elaboration of recommendations for amendments and management improvements</li> <li>➤ Evaluation of internal consistency of programmes and of adequacy and distribution of resources in relation to the needs and priorities</li> <li>➤ Evaluation of external consistency of the programmes with global, energy and environmental international and national objectives</li> <li>➤ On-going progress and ex-post assessment of actions and investments financed through energy programmes and initiatives</li> </ul>
<b>Training and Capacity Building</b>	<ul style="list-style-type: none"> <li>➤ Energy Management in Industry, Transport and Buildings</li> <li>➤ Environmental Management</li> <li>➤ Regional and Urban Energy Planning</li> <li>➤ Use of Modern Energy Technologies</li> <li>➤ Energy Markets Restructuring</li> <li>➤ Market Rules and Technical Codes in electricity and gas</li> <li>➤ Climate Change and CO<sub>2</sub> Emissions Policies</li> <li>➤ Water management</li> <li>➤ Social and Environmental Impact Assessment.</li> </ul>
<b>Information Technology Solutions</b>	<ul style="list-style-type: none"> <li>➤ Design and development of Energy / Regulatory Information Systems</li> <li>➤ Preparation of Hardware and Software Specifications</li> <li>➤ Setting up of modelling, simulation, and decision support tools for the energy, environment and water sectors</li> <li>➤ Design and development of Multimedia and/or web-based applications and tools supporting information dissemination and collaboration among groups of stakeholders.</li> </ul>

### 1.2.3 Clients

EXERGIA provides consulting services to international donor organisations, national, regional and municipal authorities, utilities and private sector businesses.

In particular, the company provides support to several **European and Third Country Government Bodies**, including central administration (Ministries) and local administration (Prefectures and Municipalities). EXERGIA also works on behalf of Regulatory Authorities, Transmission System Operators and other market institutions worldwide. In this context, EXERGIA's experts have served as advisors or key-officials to Regulatory Authorities and Ministries on matters of energy and environment policy development and implementation,

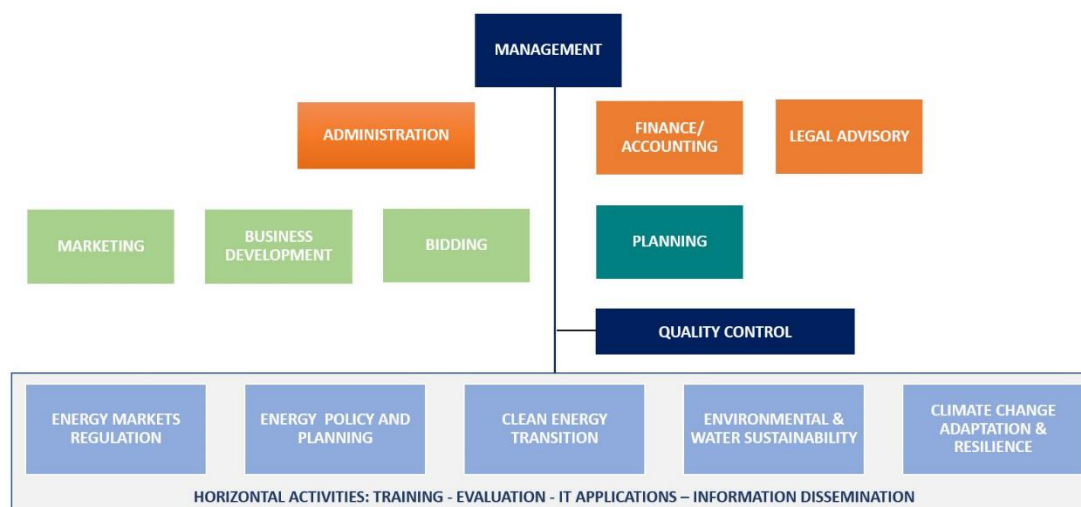
energy efficiency, renewables, energy and environmental legislation, energy markets restructuring, clean technologies, climate change, waste and water management etc.

The company has also managed numerous assignments on behalf of **International Donors and Financing Institutions**, including different Directorates of the European Commission (EC), such as DG Energy (ENER), DG Environment (ENV), DG International Cooperation and Development (DEVCO), DG Climate Action (CLIMA), DG Mobility and Transport (MOVE) etc., EuropeAid, Energy Community Secretariat/EU4Energy, European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), European Agency for Reconstruction (EAR), World Bank (WB)/ International Finance Corporation (IFC), United Nations Development Program (UNDP), Kreditanstalt für Wiederaufbau (KfW), German Technical Cooperation (GTZ) etc.

Within the **private sector**, EXERGIA supports initiatives undertaken by industrial and commercial companies, as well as independent investors in implementing energy and environmental projects, covering the whole project development cycle from initial concept and design up to financing and licensing. It also provides consulting services to industrial plants or facilities related to energy, environmental (or health and safety) and water management, as well as compliance assessments. It is indicatively referred that the company has cooperated with clients from the aluminium industry, cement industry, chemical industry, electricity generation and supply, food industry, gas supply, petroleum industry, as well as tourism private clients. The company also provides relevant services to many public and private utilities, amongst others Gazprom, TAP AG, EGL, Statoil etc.

#### 1.2.4 Human resources capacities

EXERGIA has five distinct consultancy Departments as presented in the Organizational Chart in Figure 1-1. The company also provides cross-cutting services i.e. Training, Evaluation, IT solutions and Information Dissemination to support these sectors. Apart from that, EXERGIA has also formed all the required supportive consulting sections (e.g. legal, financial advisory) that contribute with their services in areas relevant to all Departments of EXERGIA.

**Figure 1-1 Organizational Chart**

### 1.2.5 Quality Assurance, Information Security Management and Code of Conduct

EXERGIA offers its consulting services in energy, environment and water following the procedures of the international standard for **quality assurance** ISO 9001:2015 and **information security management** ISO IEC 27001:2013.

EXERGIA operates under a strict **Code of Conduct** which is committing all subcontractors and provides a broad range of guidelines for proper business conduct and for ensuring highest levels of integrity in EXERGIA's business behavior. EXERGIA will act always in the legitimate interest of the client and provide all services with integrity, confidentiality, transparency and loyalty. In a professional business environment, EXERGIA meets high expectations regarding professionalism. All EXERGIA employees are therefore required to work towards meeting these demands.

The EXERGIA Code of Conduct complies with internationally accepted ethical standards of corporate governance and competitive practices. In addition, EXERGIA's approach to Quality Management is certified since 2000 and Information Security Management is implemented. A copy of the Quality Assurance and Information Security Management Certificates is given in ANNEX 1. A copy of EXERGIA Code of Conduct is available upon request.

The consultant shall apply these procedures to this project in case of awarding.

For further information please visit the company's web page: [www.exergia.gr](http://www.exergia.gr).

## 2 QUALIFICATIONS IN THE FIELD OF THE ASSIGNMENT

### 2.1 Consultant's Strong Points

---

The Consultant is well-suited to undertake this project building on experience obtained through the implementation of various similar projects worldwide in service areas relevant to the project:

- **Broad knowledge of the specific services in question** including ex-ante, mid-term and ex-post of national or regional programs, in the fields of energy, renewable energy and energy efficiency technologies, sustainable energy, etc.
- **Advice to governmental/ regulatory authorities** on legislative, technical, organisational and institutional aspects of the energy sector, focusing on RES and EE.
- **Over 30-years relevant consulting experience worldwide** and successful management of over 500 energy and environment projects, most of which carried out in developing countries.
- **Sound understanding of the specific socio-economic environment and the local needs in the MENA region, including other CIS, Eastern and Central European countries.**
- **International experience on best practices on EE and RES applications in various sectors** based on projects implemented worldwide and financed by an international clientele basis including the EBRD, WB, IFC, European Commission, KfW etc.
- **Implementation of quality control** in all projects (EN ISO 9001:2008 certification).
- **Ample international and local based resources** and support to fulfill the requirements and ensure the proper execution of the project in terms of quality, time and budget.

EXERGIA has been working for more than 25 years (more than 500 projects) in the field of energy, including renewable energy and power, in providing technical assistance to policy makers of Ministries, international donors, Regional Energy Authorities worldwide. In this context the company has participated in designing, assessing and evaluating energy programs and initiatives with focus on developing countries of Eastern and Central Europe, Central Asia, the Mediterranean, Africa, NIS countries and Middle East Countries since 1998 until today. Specific services offered by the company include assessment of program implementation and program performance with respect to efficiency and effectiveness, design and evaluation of qualitative and quantitative program objectives, evaluation of technical/ financial program management, impact assessment, provision of recommendations for amendments and management improvements, internal and external consistency evaluation in relation to needs, etc. Through the numerous projects EXERGIA has gained proven understanding of the relevant evaluation standards and norms

and is experienced with the relevant evaluation ethics of international donors. Furthermore, the Consultant is experienced with innovative and creative data collection, analytical and other communication methods all in respect to the kind of evaluation they are required to perform.

The Consultant has proven expertise in managing successfully similar projects financed by various categories of clients such as Governmental Bodies, Administration, International Organizations and Donors, Regulatory Authorities, Industry, Utilities and other energy market actors. Last but not least, the Consultant has ample access to human resources, internationally and locally based, that can be mobilized on a short notice in order to fulfil the requirements and ensure the proper execution of the project in terms of quality, time and budget.

## 2.2 Project References

This Chapter demonstrates the tangible technical and professional capacity of the Consultant to undertake and carry out successfully this project deriving from previous assignments completed.

<b>Assignment name:</b> ENI - Technical assistance to the renewable energy and energy efficiency programme in Jordan REEE II	<b>Approx. value of the contract (in current US\$):</b> 5,459,760
<b>Country:</b> Jordan <b>Location within country:</b> Amman	<b>Duration of assignment (months):</b> 48
<b>Name of Client:</b> EC - European Commission	<b>Total N° of staff-months of the assignment:</b> 96
<b>Contact Person, Title/Designation, Tel. No./Address:</b>	
<b>Start date (month/year):</b> 11/2016 <b>Completion date (month/year):</b> 11/2020	<b>No. of professional staff-months provided by your consulting firm/organization or your sub consultants:</b> 46
<b>Name of associated Consultants, if any:</b> GFA Consulting Group GmbH, Renewables Academy AG (RENAC)	<b>Name of senior professional staff of your consulting firm/organization involved and designation and/or functions performed:</b> Habib El Andaloussi, Ammar Al-TaherGeorge Vlondakis
<b>Description of Project:</b> The EU funding REEE II project is a Technical Assistance (TA) project in Jordan. The TA Project “Technical Assistance To The Renewable Energy And Energy Efficiency Programme (REEE II)”	

is conceived to support the implementation of REEE II and the general Government of Jordan (GoJ) energy strategy, and has the following specific objectives:

- i) To complement the institutional, legislative and fiscal reforms to mobilize public and private actors to achieve the goals of 10% renewable energy and 20% of energy savings by 2020;
- ii) To contribute to the implementation of sustainable production and consumption patterns, behavioural changes and resource demand management.

To achieve the above, the project supports the main stakeholders (Ministry of Energy and Mineral Resources: MEMR; Ministry of public work and housing: MOPWH; Ministry of Water and Irrigation: MOWI; Ministry of Environment: MOENV; Greater Amman Municipality: GAM; National Energy Research Centre: NERC; Energy and Minerals Regulatory Commission: EMRC; Ministry of Transport: MOT; and potential private operators in the construction and transport sectors) to establish detailed plans of actions and to implement a set of policy instruments.

This project, complements what was achieved through REEE-I regarding relevant policies, strategies and regulations.

The project comprises three project components as follows.

#### Component 1: Policy and Strategy

- Task A1.1: Energy Policy Review
- Task A1.2: Energy Data and Planning
- Task A1.3: TA for JREEEF
- Task A1.4: Market Development and Financing
- Task A1.5: Residential/Household sector and public Building
- Task A1.6: Transport Sector
- Task A1.7: Grid Planning Beyond 2020

#### Component 2: Implementation Assistance

- Task A 2.1: Tendering procedures
- Task A2.2: MEMR RE Projects
- Task A2.3: EE Projects in Buildings
- Task A2.4: Water Sector Projects
- Task A2.5: Energy from Waste
- Task A2.6: Sustainable Street lighting

#### Component 3: Communication and Capacity Building

- Task A3.1: Communication and Awareness Campaign
- Task A3.2: Policy Dialogue
- Task C3.3: Training and Capacity Building

#### **Description of actual services provided by your staff within the assignment:**

- Analyse the technical/legal/regulatory needs of the sector among the different partners;



- Design a suitable flexible work-plan that reflects the partners' needs, on a demand-driven base, as well as helping the programme partners in achieving the sector budget support components;
- Implement a comprehensive work-plan that support the partner's' strategic, legal, regulatory and technical needs, and develop any needed document/plan in this regard;
- Support the programme steering committee and technical committee in conducting the meetings regularly and reporting and follow-up from different meetings, aligning the outcomes into the programme implementation;
- Support the structured policy dialogue process, through conducting regular meetings, as well as ensuring feedback fully integrated into sector development;
- Assist the GoJ and the programme partners to review the strategic, legal, regulatory and technical frameworks to develop the sector;
- Support the establishment, operationalisation and sustainability of the cooperation model among JREEEF(MRMR) and NERC;
- Guide NEPCO to set their RE targets beyond 2020 in their strategy through examining different studies/surveys that have been conducted lately and provide the needed input to integrate the RE targets beyond 2020;
- Assist the programme partners in the design, evaluation and implementation of the different tendering procedures for the proposed projects;
- Implement a reasonable study-tour programme for the programme partners (as deemed necessary) to enhance the capacity development and exchange of know-how;
- Ensure synergies among the programme partners to enhance the sector development;
- Build on other Donor's/Financiers support and integrate in the capacity building programme to be delivered;
- Design and implement a comprehensive communication plan and campaign with the programme partners in the REEE theme, building on previous campaigns conducted by the EU and the programme partners;
- Ensure sustainability and dissemination of the programme results;
- Comply with the latest Communication and Visibility Manual for EU External Action and ensure reporting on that.
- Using power systems analysis software, carrying of a) dynamic analysis of National Electrical Power Company system for the years 2017 and 2022, including identification of transient stability issues in each year introduced by renewable power; b) frequency stability analysis; c) static voltage stability analysis and d) recommendation of mitigation measures, including infrastructure such as battery storage.

<b>Assignment name:</b> Support Study on the Evaluation of Article 7A of the Fuel Quality Directive and assessment of approaches to reduce Greenhouse Gas emissions from transport fuels	<b>Approx. value of the contract (in current US\$):</b> 257,275
<b>Country:</b> EU <b>Location within country:</b>	<b>Duration of assignment (months):</b> 11
<b>Name of Client:</b> EC - European Commission, DG CLIMA	<b>Total N° of staff-months of the assignment:</b> 261
<b>Contact Person, Title/Designation, Tel. No./Address:</b> Ms. Laura Lonza Av. de Beaulieu 24, 1160 Auderghem, Belgium, Laura Lonza, Policy Officer, laura.lonza@jrc.ec.europa.eu	
<b>Start date (month/year):</b> 07/2020 <b>Completion date (month/year):</b> 06/2021	<b>No. of professional staff-months provided by your consulting firm/organization or your sub consultants:</b> 77
<b>Name of associated Consultants, if any:</b> COWI Belgium	<b>Name of senior professional staff of your consulting firm/organization involved and designation and/or functions performed:</b> Theodor Goumas - Energy Policy Expert, George Vourliotakis - Biofuels Policy and Market Expert David Chiaramonti - Biofuels and Bioenergy Policy and Market Expert, Roj Anders - Senior expert on the utilization of transportation fuels Nicoletta Metaxatos - Junior Evaluation Environmental Expert
<b>Description of Project:</b> This assignment is part of the Framework Contract for the provision of services in the area of evaluation, analysis, support to impact assessments and implementation of climate policies. The objective of the project is to provide support to the Commission in relation to the following main areas of investigation, in accordance with the Commission's Better Regulation guidelines: Evaluating the implementation by Member States of the current Fuel Quality Directive specifically with respect to the implementation of the greenhouse gas (GHG) intensity reduction of emissions over the lifecycle of transport fuels. Assessing options to steer the progressive reduction of road transport fuels' GHG intensity reduction towards 2030 and 2050 while ensuring consistency with relevant legislation and ongoing other policy initiatives, including RED II and its possible revision as well as aviation and maritime initiatives under the 2020 Work Programme.	
<b>Description of actual services provided by your staff within the assignment:</b> ➤ Evaluation of Directive 98/70/EC relating to the quality of petrol and diesel fuels ("Fuel Quality Directive") in accordance with the Better Regulation guidelines;	

- Refinement and further elaboration of the intervention logic and the "Theory of Change", finalisation of the evaluation questions and development of the evaluation matrix through desk study and conduction of scoping interviews prior to the evaluation of the Directive in order to strengthen the understanding of how the Directive intended to work and produce its intended effects. The scoping interviews will be with relevant policy officials from the Commission, with officials from the competent authorities from Member States, and with private key stakeholder (e.g. Fuels Europe);
- Evaluation of the Directive on its Effectiveness, Efficiency and EU Value added, including impact assessment step of problem definition, baseline development and policy option analysis. This will be done through desk research so as to collect information, evidence and data on progress achieved in the EU in improving quality of fuel and reducing GHG emissions as well as the efforts from Member States and industry actors, by reviewing the national, EU, industrial reports, academic studies, forecast and modelling studies. Furthermore, this step will include Statistical analysis by drawing time-based trends on fuel supply MS and associated GHG emissions, running correlation and regression analysis to understand factors influence the change in fuel quality and associated GHG emissions. EXERGIA also participated in interviews with the stakeholders and surveys to get inputs to the evaluation analysis and policy option assessment;
- Calculation of the GHG emission intensity of the overall fuels used in transport, based on the life-cycle approach of the FQD, and its reduction from the 2010 baseline set in the FQD. Calculations to be performed for various fuel mix scenarios considered in the 2030 Climate Target Plan;
- Analysis on the basis of each fuel type/category considered in the fuels mix, focus on the contribution of the GHG intensity of gaseous fuels to the overall fuel mix GHG intensity, analysis of the contribution of the fuels related to the sustainability criteria set in RED II.

<b>Assignment name:</b> Final Evaluation of the Renewable Energy and Energy Efficiency Programme, Bangladesh - GIZ Framework agreement	<b>Approx. value of the contract (in current US\$):</b> 48,463
<b>Country:</b> Bangladesh <b>Location within country:</b> Dhaka	<b>Duration of assignment (months):</b> 7
<b>Name of Client:</b> Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	<b>Total N° of staff-months of the assignment:</b> 3
<b>Contact Person, Title/Designation, Tel. No./Address:</b> Ulrike Haffner, Fachkonzeptionistin Stabstelle Evaluierung, T + 49 228 4460 3326 E ulrike.haffner@giz.de Skype: Haffner_giz Friedrich-Ebert Allee 36 53113 Bonn Deutschland/Germany	

<b>Start date (month/year):</b> 12/2018 <b>Completion date (month/year):</b> 07/2019	<b>No. of professional staff-months provided by your consulting firm/organization or your sub consultants:</b> 2
<b>Name of associated Consultants, if any:</b>	<b>Name of senior professional staff of your consulting firm/organization involved and designation and/or functions performed:</b> T. Goumas (Team Leader, International Evaluation Expert), Mr. Mahmoud Hassan (Local Evaluation Expert), Nicoletta Metaxatos (Backstopping Expert)
<b>Description of Project:</b> <p>The objective of the GIZ framework agreement for central projects evaluation in the energy sector, was to establish a pool of contractors to cover a 2-year period for mid-term and final project evaluations in the thematic area "energy". EXERGIA was assigned the final evaluation of the "Renewable Energy and Energy Efficiency Programme (REEEP), Bangladesh". The REEEP was based on the core problem, that the conceptual basis for the dissemination of Renewable Energy (RE) and Energy Efficiency (EE) measures are not adequate. The Government of Bangladesh (GOB) sets targets for RE and EE though, the knowledge of technological applications and its business case were inadequate, so was other market enabling conditions including relevant policies.</p> <p>GIZ REEEP has three programme components: Renewable energy (Output A), energy efficiency (output B) and the supporting capacity development of SREDA (Output C). The programme also focused on developing business case and capacity development of service providers. Furthermore, it was envisioned that the RE and EE technologies may go in a commercial distribution by service providers with support from Government through SREDA.</p>	
<b>Description of actual services provided by your staff within the assignment:</b> <ul style="list-style-type: none"> <li>➤ The Central Evaluation was divided into two phases: the inception phase and the data collection and evaluation phase. EXERGIA's services included the following:</li> <li>➤ examination of available data, checking data availability, monitoring (partner) systems and observation tools (KOMPASS),</li> <li>➤ defining evaluation basis,</li> <li>➤ identifying relevant interview partners, updating the stakeholder map and if possible, identifying a control group,</li> <li>➤ conducting explorative interviews,</li> <li>➤ collected data are analysed, triangulated, assessed and validated systematically, and evaluation report is elaborated.</li> </ul>	

<b>Assignment name:</b> MFC4-092 Assessment of implementation of sector budget "Renewable energy and Energy Efficiency Programme in Jordan"	<b>Approx. value of the contract (in current US\$):</b> 161,422
<b>Country:</b> Jordan <b>Location within country:</b> Amman	<b>Duration of assignment (months):</b> 24
<b>Name of Client:</b> EU Delegation to Jordan	<b>Total N° of staff-months of the assignment:</b> 9
<b>Contact Person, Title/Designation, Tel. No./Address:</b> Omar Abu Eid, P.O. Box 852099, 11185 Amman, EUD to Jordan	
<b>Start date (month/year):</b> 09/2012 <b>Completion date (month/year):</b> 09/2014	<b>No. of professional staff-months provided by your consulting firm/organization or your sub consultants:</b> 9
<b>Name of associated Consultants, if any:</b> COWI	<b>Name of senior professional staff of your consulting firm/organization involved and designation and/or functions performed:</b> Dr. Theodor Goumas (Energy program evaluation expert), Dr. Ilse Schuster, (MFA evaluator), Dr. George Vlondakis (Project Director)
<b>Description of Project:</b> <p>The European Commission (EC) and the Government of Jordan signed in December 2011 the first sector budget support programme for "Renewable energy and Energy Efficiency Programme in Jordan" (programme number 2011/22-721), for a total value of €35 million. The key organisations and stakeholders are: the Ministry of Planning and International Cooperation (MoPIC) with a coordinating role; the Ministry of Energy &amp; Mineral Resources (MEMR) who is a main policy/technical sector institution and will facilitate the implementation of the pilot projects component, the Ministry of Public Works and Housing (MPWH) with its National Building Council who follow the development &amp; enforcement of building codes, the National Research &amp; Development Centre (NRDC)/energy programme (NERC) who is considered as the technical arm for applied RE/EE applications for the Government of Jordan, Electricity Regulatory Commission (ERC), the Ministry of Finance (MoF) with policy and treasury responsibilities; the General Budget Department (GBD) with budgeting responsibilities.</p> <p>The main objective of the project was to develop a clear assessment of progress of Jordan's implementation of developments/reforms in the anticipated fields. At least three missions, one or two every year, took place. The Consultant produced in each mission a Report assessing / evaluating compliance with the General Reform Benchmarks and with the Specific Reform Benchmarks of the RE/EE SBS programme. In addition to the evaluation tasks, the Consultant prepared recommendations for program implementation improvements.</p>	
<b>Description of actual services provided by your staff within the assignment:</b> > Evaluation of implementation activities of RES/EE actions	

- Evaluation of financing management capacity for the EE/RES program
- Adaptation of methodology for evaluation of program
- Workshops and consultation with program counterparts for amendment actions.

<b>Assignment name:</b> Final Evaluation of Nigerian Energy Support Programme	<b>Approx. value of the contract (in current US\$):</b> 29,266
<b>Country:</b> Nigeria <b>Location within country:</b> Abuja	<b>Duration of assignment (months):</b> 3
<b>Name of Client:</b> Federal republic of Nigeria	<b>Total N° of staff-months of the assignment:</b> 1
<b>Contact Person, Title/Designation, Tel. No./Address:</b> EU Delegation in Nigeria, 21st Crescent, Off Constitution Avenue, Central Business District, Garki, P.O. Box 280, Abuja, Nigeria	
<b>Start date (month/year):</b> 07/2017 <b>Completion date (month/year):</b> 10/2017	<b>No. of professional staff-months provided by your consulting firm/organization or your sub consultants:</b> 1
<b>Name of associated Consultants, if any:</b> COWI	<b>Name of senior professional staff of your consulting firm/organization involved and designation and/or functions performed:</b> George Georgocostas (Project Manager), Kyriakos Argyroudis (Team Leader, Evaluator), Nicoletta Metaxatos (Junior Evaluator)
<b>Description of Project:</b> The evaluation was conducted on behalf of EU Delegation to Nigeria and ECOWAS in Abuja, Nigeria, by EXERGIA. The evaluation covered the Nigerian Energy Support Programme (NESP) co-funded by the German Federal Ministry for Economic Cooperation and Development (BMZ), developed under the EU funded support to reforms in the power sector of Nigeria, under the EASE Programme and funded from the 10th European Development Fund (EDF) in the framework of the revised ACP-EU Partnership Agreement. This EU support to Nigeria power sector, under NESP, is being managed under indirect centralized management through a Delegated Agreement with GIZ as implementing agency. The total budget for NESP amounted to €24.5 M (€15.5 M funded by the EU and €9 M contributed by BMZ). EXERGIA was assigned to evaluate whether the "Nigeria Energy Support Programme" (NESP) under the Energising access to sustainable energy in Nigeria (EASE) achieved its set objectives and provide to relevant external co-operation services of the European Union. NESP aims to improve the conditions for the application of and investments in renewable energy, energy efficiency and rural electrification. NESP is divided into four units – (1) Policy Reform and on-grid Renewable Energy, (2) Energy Efficiency, (3) Rural Electrification and Sustainable Energy Access, and (4) Capacity Development & Training.	



The project specifically aimed collecting information that would be helpful for future informed decision or project implementation. The evaluation focused on the following parameters:

- Relevance of the programme;
- Programme Design and Implementation;
- Validity of assumptions;
- Efficiency of Programme Implementation;
- Effectiveness of organizational structure;
- Impact;
- Stakeholders;
- Alternatives and recommendations.

**Description of actual services provided by your staff within the assignment:**

- Desk Study, review of all relevant documentation provided by the EUD;
- Meeting with the key beneficiaries of the programme and other stakeholders, including NESP programme director, the EUD, GIZ, etc., to address the challenges of the project and the lessons learned during the implementation of the project;
- Visits to two project locations;
- Two-fold approach was applied for the evaluation:
- Programme evaluation: a review of the implementation of NESP according to the standard criteria (relevance, efficiency, effectiveness, impact and sustainability),
- Stakeholder evaluation: an assessment on whether the programme enjoys the ownership, support and involvement of the main stakeholders.

<b>Assignment name:</b> Final Evaluation of the "Europe-China Clean Energy Centre" (EC2-Project)	<b>Approx. value of the contract (in current US\$):</b> 59,272
<b>Country:</b> China <b>Location within country:</b> Beijing	<b>Duration of assignment (months):</b> 6
<b>Name of Client:</b> Chinese Ministry of Commerce; Chinese National Development and Reform Commission, National Energy Administration of China	<b>Total N° of staff-months of the assignment:</b> 50
<b>Contact Person, Title/Designation, Tel. No./Address:</b>	
<b>Start date (month/year):</b> 01/2017 <b>Completion date (month/year):</b> 07/2017	<b>No. of professional staff-months provided by your consulting firm/organization or your sub consultants:</b> 25
<b>Name of associated Consultants, if any:</b> Li Xiaozhen	<b>Name of senior professional staff of your consulting firm/organization involved and designation and/or functions performed:</b> Theodor Goumas (Team Leader), Nicoletta Metaxatos (Backstopping Expert)

**Description of Project:**

The global objective of the assignment is to review the outcome of the “Europe- China Clean Energy Centre”, EC2, and whether the project achieved the initially agreed objectives and results through the planned activities. Furthermore, the assignment’s objectives also include evaluation of the process of the project’s design and implementation, as well as evaluation of the relevance to the clean energy sector in China. The assignment also aims at assessing the efficiency and effectiveness with which resources have been used to generate results and achieve project objectives with special emphasis on impact and sustainability.

The final evaluation of EC2 aims as well at helping DG DEVCO to draw lessons for the purpose of improving the design and the implementation of future related projects and programs.

**Description of actual services provided by your staff within the assignment:**

- evaluation of the EC2
- stakeholders engagement

<b>Assignment name:</b> SE4ALL Energy Database and Monitoring & Evaluation framework for promoting sustainable energy in Uganda	<b>Approx. value of the contract (in current US\$):</b> 11,370
<b>Country:</b> Uganda <b>Location within country:</b> Kampala	<b>Duration of assignment (months):</b> 1
<b>Name of Client:</b>	<b>Total N° of staff-months of the assignment:</b> 1
<b>Contact Person, Title/Designation, Tel. No./Address:</b>	
<b>Start date (month/year):</b> 11/2015 <b>Completion date (month/year):</b> 12/2015	<b>No. of professional staff-months provided by your consulting firm/organization or your sub consultants:</b> 1
<b>Name of associated Consultants, if any:</b>	<b>Name of senior professional staff of your consulting firm/organization involved and designation and/or functions performed:</b> George Vlondakis
<b>Description of Project:</b> The main objective of this assignment was to create an SE4ALL (Sustainable Energy for All) information database to act as a centralised repository for energy data for reporting, monitoring and verification of progress of SE4ALL indicators in Uganda. The goal of the assignment was to make energy access, renewable energy and energy efficiency data accessible in order to support informed decision-making in Uganda by establishing and operating a one-stop centre at the SE4ALL Secretariat to disseminate reliable energy data and information to policy-makers, business and the public. The database should also contribute to Government setting and measurement of achievable energy access, renewable energy and energy efficiency targets.	

The second specific objective of the assignment is to assist Uganda USE4ALL Secretariat in the development of its monitoring and evaluation system, which would allow USE4ALL to ensure regular monitoring of progress of the implementation of USE4ALL Action Agenda.

Central aspect of the assignment was the design and development of a database tool enabling data to be collected and searched in a systematic way. The architecture of the database determined how data is collected, stored and assessed. The design of the database tool allowed for additions of data to be made in a universal format. Instructions were provided for the database users.

**Description of actual services provided by your staff within the assignment:**

- Preparation of the tools and procedures for periodical collection, processing, analysis and dissemination of data and information.
- Collection and systematization of energy data with an emphasis on energy access (both electricity and clean cooking), renewable energy and energy efficiency
- Creation of an energy database structure enabling data to be gathered with relevant statistics, including software for survey questionnaires, database application for data management and reporting, etc.
- Training of selected Secretariat's staff on use of the database and reporting of energy data and indicators and the possibility to add new stakeholders, projects, plants, etc.

<b>Assignment name:</b> EU Operational Program "Competitiveness and Entrepreneurship" Evaluation Consultant	<b>Approx. value of the contract (in current US\$):</b> 619,438
<b>Country:</b> Greece <b>Location within country:</b> Various	<b>Duration of assignment (months):</b> 36
<b>Name of Client:</b> Greek Ministry of Economy, Competitiveness and Shipping	<b>Total N° of staff-months of the assignment:</b> 64
<b>Contact Person, Title/Designation, Tel. No./Address:</b> Aggeliki Fetsi, Head of Unit A1, afetsi@mou.gr, +30 210 7450862 Mesogeion 56, 115 27 Athens, Greece	
<b>Start date (month/year):</b> 04/2012 <b>Completion date (month/year):</b> 04/2015	<b>No. of professional staff-months provided by your consulting firm/organization or your sub consultants:</b> 16
<b>Name of associated Consultants, if any:</b> REMACO SA, OMAS SA	<b>Name of senior professional staff of your consulting firm/organization involved and designation and/or functions performed:</b> N. Komioti (Senior Energy Expert – Project Director), G. Goula (Energy & Environment Expert – Team Leader), I. Stefanou (Energy

	expert), G.Georgokostas (Senior Energy Expert), Th. Goumas (Senior Policy expert)
<p><b>Description of Project:</b></p> <p>The project comprises the provision of evaluation consulting services to the Greek Ministry of Economy, Competitiveness and Shipping, during the implementation of the EU Operational Programme "Competitiveness and Entrepreneurship" 2007 – 2013 (OPCE II).</p> <p>The Evaluation Consultant assisted in the respective evaluations of the Regional Operational Programmes of the five Transition Regions, as far as it regards Competitiveness and Entrepreneurship actions. Evaluation during the implementation of OPCE II, aims at providing the competent decision-making organizations (Monitoring Committees, Managing Authorities etc.) with suitable information, data and estimations regarding the correctness of the strategy, the feasibility of the quantitative targets and the effectiveness and efficiency of the implemented interventions, in order to develop a valid and objective perception on the extent up to which the set targets are gradually achieved and remain up-to-date. In this framework, evaluations contribute to the improvement of the programming correctness and appropriateness, facilitating the identification of points that may require to be re-determined in order to ensure achievement of the initial targets. The Evaluation Consultant undertook a thorough analysis of the implementation data, made estimations on their future development and end-up in conclusions and proposals for suitable measures where required. Evaluation covered all the Priority Axes of OPCE. EXERGIA in particular is subcontracted for Priority Axis 4 "Completion of the Country's Energy System and Sustainability Enhancement" focusing on the country's energy supply security, within the framework of achieving environmental goals, supporting energy market liberalization and implementing its accession to the large international electricity and natural gas networks.</p>	
<p><b>Description of actual services provided by your staff within the assignment:</b></p> <ul style="list-style-type: none"> <li>➤ Assessment of the continuing relevance and consistency of strategy.</li> <li>➤ Evaluation of the OP's qualitative and quantitative objectives system.</li> <li>➤ Evaluation of the OP's implementation effectiveness and efficiency.</li> <li>➤ Evaluation of the monitoring, management, control and evaluation mechanisms for the interventions.</li> <li>➤ Horizontal evaluation of the environmental impact of the Operational Programme.</li> <li>➤ Horizontal evaluation of the Programme's compliance with the principles of equality between men and women, non-discrimination and accessibility for persons with disabilities.</li> <li>➤ Evaluation of all the competitiveness and entrepreneurship interventions' contribution at country, region and spatial unit level.</li> <li>➤ Evaluation of the Programme's contribution to spatial development policy priorities of the NSRF (sustainable urban development, rural and island areas development etc.).</li> <li>➤ Field surveys for in-depth analysis of selected interventions.</li> <li>➤ Provision of realistic and feasible proposals for the improvement of the Programme's effectiveness.</li> <li>➤ Within the energy sector, evaluation focused on the following actions:</li> <li>➤ Natural gas use promotion.</li> <li>➤ Completion-modernization of the country's electricity network.</li> </ul>	

- Penetration of renewable energy sources and energy saving projects.
- Support of special investments within the diesel sector in view of environmental protection.
- Rational use of natural resources.

<b>Assignment name:</b> Mid Term Evaluation of the Climate Change Trust Fund in the Maldives	<b>Approx. value of the contract (in current US\$):</b> 128,858
<b>Country:</b> Maldives <b>Location within country:</b> Various	<b>Duration of assignment (months):</b> 3
<b>Name of Client:</b> EU Delegation in Sri Lanka, Government of Maldives	<b>Total N° of staff-months of the assignment:</b> 5
<b>Contact Person, Title/Designation, Tel. No./Address:</b> Harshini Halangode, EU Delegation to Sri Lanka & Maldives, 26, Sir Marcus Fernando Mawatha, Colombo 7, Sri Lanka, Tel: +94 11 2674413-4, Fax: + 94 11 2678860, Harshini.HALANGODE@eeas.europa.eu 26, Sir Marcus Fernando Mawatha, Colombo 7, Sri Lanka	
<b>Start date (month/year):</b> 02/2014 <b>Completion date (month/year):</b> 05/2014	<b>No. of professional staff-months provided by your consulting firm/organization or your sub consultants:</b> 2
<b>Name of associated Consultants, if any:</b> COWI	<b>Name of senior professional staff of your consulting firm/organization involved and designation and/or functions performed:</b> T. Goumas (Energy program evaluation expert), K. Batos (Quality Controller), G. Goula (Backstopping expert)
<b>Description of Project:</b> The general objective of the assignment was to contribute to the successful implementation of the Climate Change Trust Fund (CCTF) by evaluating the performance of its projects, identifying key lessons learnt and proposing suitable implementation to the Project Steering Committee. The selected funded projects comprise the following: (i) Clean Energy for Climate Mitigation (CECM), (ii) Wetlands Conservation and Coral Reef Monitoring for Adaptation (WCCM), (iii) Integrated Solid Waste Management in the South Ari Atoll for Reducing Greenhouse Gas Emissions (AASWM). The evaluation mission of CCTF evaluated and provided an overview of these projects in line with the standard evaluation criteria endorsed by OECD-DAC (relevance, effectiveness, efficiency, impact and sustainability). The evaluation also took into consideration EC climate change policies, as well as horizontal issues such as gender equality, environment, capacity development, private sector development and local governance.	
<b>Description of actual services provided by your staff within the assignment:</b>	

- Independent analysis and evaluation of the progress of the CCTF implementation;
- Contribution to CCTF progress evaluation and documentation against indicators, achievements and shortcomings;
- Provision of recommendations to the Project Steering Committee for CCTF's performance improvement including climate funding, response to stakeholders needs, address of challenges/ shortcomings, best management practices, exploitation of lessons learnt, time duration and local ownership of the project results etc.
- Information of stakeholders and donors on CCTF's performance results;
- Assessment of cross-cutting issues as gender, disabled persons, good governance;
- Assessment of visibility, information and communication issues.

<b>Assignment name:</b> MFC4-089 Mid-term Evaluation of the Europe China Clean Energy Centre (EC2) project	<b>Approx. value of the contract (in current US\$):</b> 59,197
<b>Country:</b> China <b>Location within country:</b> China	<b>Duration of assignment (months):</b> 1
<b>Name of Client:</b> EU Delegation, China	<b>Total N° of staff-months of the assignment:</b> 2
<b>Contact Person, Title/Designation, Tel. No./Address:</b> Ms. Michella Tagliaferri 15 Dong Zhi Men Wai Dajile Sunlitun, 100600 Beijing, China	
<b>Start date (month/year):</b> 10/2012 <b>Completion date (month/year):</b> 11/2012	<b>No. of professional staff-months provided by your consulting firm/organization or your sub consultants:</b> 1
<b>Name of associated Consultants, if any:</b> COWI	<b>Name of senior professional staff of your consulting firm/organization involved and designation and/or functions performed:</b> Dr. Theodor Goumas (Energy program evaluation expert), Dr. George Vlondakis (Quality control expert)
<b>Description of Project:</b> The EU-China Energy dialogue between the European Commission (DG ENER) and the National Energy Administration (NEA) has been successfully running since 2005, focusing on a range of priority areas: energy security, nuclear energy, smart grids, energy efficiency in energy generation and utilization, clean coal, renewable energy. The dialogue is being supported by cooperation projects, among which the flagship initiative Europe-China Clean Energy Centre (EC2). EC2's objective is to increase the utilisation of clean energy in China and it acts as an intelligent hub, providing advice to Chinese and European players in the clean energy sector to foster international technology cooperation, provide assistance on policy making, deliver institutional capacity building and raise awareness on clean energy and its benefit to the environment.	



<p>The overall objective of the present Mid-Term evaluation is to assess the extent to which the project has achieved its purpose to date and verify the actual conditions for its successful completion. More specifically the consultant has undertaken to evaluate, draw conclusions and formulate recommendations on all technical and managerial aspects as follows:</p> <ul style="list-style-type: none"> <li>➤ the quality of the project design and the extent to which the project remains relevant with</li> <li>➤ the impact EC2's activities have had or may still expected to have on its beneficiaries</li> <li>➤ project performance with respect to efficiency and effectiveness</li> <li>➤ project management and coordination arrangements</li> <li>➤ the quality and adequacy of the Centre's knowledge management mechanisms and communication tools and strategy</li> <li>➤ the prospects of sustainability.</li> </ul>
<p><b>Description of actual services provided by your staff within the assignment:</b></p> <ul style="list-style-type: none"> <li>➤ Evaluation of implementation activities of EC2 Third Action Plan</li> <li>➤ Evaluation of financing efficiency capacity for the program</li> <li>➤ Adaptation of methodology for evaluation of program</li> <li>➤ Workshops and consultations with program counterparts for amendment actions.</li> </ul>

<p><b>Assignment name:</b> DG TREN FWC Lot 3 Impact Assessments and Evaluations in the field of Transport – STUDY ON LONG-TERM QUANTITATIVE ASSESSMENT OF TRANSPORT POLICY SCENARIOS</p>	<p><b>Approx. value of the contract (in current US\$):</b> 115,156</p>
<p><b>Country:</b> EU <b>Location within country:</b></p>	<p><b>Duration of assignment (months):</b> 6</p>
<p><b>Name of Client:</b> EC/ DG for Mobility &amp; Transport</p>	<p><b>Total N° of staff-months of the assignment:</b> 5</p>
<p><b>Contact Person, Title/Designation, Tel. No./Address:</b> Raphael ZAYAT, Director of COWI Belgium, Avenue de Tervueren 13 B, B-1040 Brussels, BELGIUM, Tel: +32 2 511 2383 EC, DG Energy Unit A3: Economic analysis, Impact assessment &amp; Evaluation, DM28 01/047 B-1049 Brussels, Belgium</p>	
<p><b>Start date (month/year):</b> 08/2010 <b>Completion date (month/year):</b> 02/2011</p>	<p><b>No. of professional staff-months provided by your consulting firm/organization or your sub consultants:</b> 1</p>
<p><b>Name of associated Consultants, if any:</b> E3M-Lab of National Technical University of Athens (ICCS/NTUA) and LAT Laboratory of</p>	<p><b>Name of senior professional staff of your consulting firm/organization involved and designation and/or functions performed:</b> Dr. George Vlondakis (Project Manager)</p>

Aristotle of University of Thessaloniki (sub-contractors)	
<p><b>Description of Project:</b></p> <p>The objective of the study was to provide a solid background for the new White Paper on Transport, through a long-term quantitative assessment of a series of transport policy variants towards a sustainable form of mobility. It provides several long-term quantitative transport scenarios for EU Member States, related to a Reference scenario showing current trends and adopted policies. Modelling was developed enabling the assessment of impacts on sustainability, evaluating policy measures (i.e. the internalisation of external costs, regulation of fuel efficiency of vehicles, regulation of renewables share in transport, fuel taxation, deployment of Intelligent Transport Systems, etc.) in packages. The model was based on a bottom-up approach, covering relevant aspects for the transport sector like: passenger/freight transport, all transport modes, urban/interurban dimension and the future technology portfolio. Detailed quantitative results were provided for transport activity, energy demand, GHG emissions and other pollutants, vehicle stock, external costs of transport etc.</p>	
<p><b>Description of actual services provided by your staff within the assignment:</b></p> <ul style="list-style-type: none"> <li>➤ Review of past studies and scenarios.</li> <li>➤ Reference scenario development with a projection up to 2050 of developments in the absence of new policies, covering transport activity, energy consumption and CO2 emissions.</li> <li>➤ Support in the design of scenarios/variants and measures enabling a sustainable, energy-efficient and environmental friendly form of mobility.</li> <li>➤ Evaluation of three policy scenarios/variants, covering energy consumption, GHG and other emissions etc.</li> <li>➤ Review of a range of policy measures as relevant regulations, economic instruments for GHG emissions reduction, R&amp;D stimulation in transport technologies, market stimulation etc.</li> <li>➤ Cost-benefit impact assessment.</li> <li>➤ GHG emissions reporting on tank to wheel basis, together with estimation of the well to tank emissions.</li> <li>➤ Specified sensitivity analysis e.g. looking at some higher/lower transport activity growth, oil prices etc.</li> </ul>	

<p><b>Assignment name:</b> MFC4-021 Evaluation of 5 Project Reports under the Energy Efficiency Component of the EU-China Energy and Environment Programme</p>	<p><b>Approx. value of the contract (in current US\$):</b> 36,611</p>
<p><b>Country:</b> CHINA <b>Location within country:</b></p>	<p><b>Duration of assignment (months):</b> 1</p>
<p><b>Name of Client:</b> EU Delegation, China</p>	<p><b>Total N° of staff-months of the assignment:</b> 2</p>
<p><b>Contact Person, Title/Designation, Tel. No./Address:</b></p>	

<b>Start date (month/year):</b> 06/2010 <b>Completion date (month/year):</b> 07/2010	<b>No. of professional staff-months provided by your consulting firm/organization or your sub consultants:</b> 2
<b>Name of associated Consultants, if any:</b> COWI	<b>Name of senior professional staff of your consulting firm/organization involved and designation and/or functions performed:</b> Th. Goumas Dr. Theodor Goumas (Energy program evaluation expert), G. Georgocostas (Energy program evaluation expert)
<b>Description of Project:</b> The overall objective of this contract was to evaluate the final technical reports for the following projects under the Energy Efficiency Component of the EU-China Energy and Environment Programme (EEP), which had not been assessed prior to the closure of the PMU: <ul style="list-style-type: none"> <li>➤ Support Services for Compliance Monitoring and Promotion of the China Energy Label in the People's Republic of China,</li> <li>➤ Definition of Appropriate Mechanisms for the Adoption of Energy Efficient Motor Systems (EEMS) in the Chinese Energy Intensive Industry,</li> <li>➤ Feasibility Study- Best Options and Policy Framework for Conservation and Substitution of Oil by Clean Coal Technologies,</li> <li>➤ Establish the pilot project of high efficient lighting through an incentive scheme,</li> <li>➤ Promotion of waste heat and pressure recovery in Chinese industry through information dissemination and the Clean Development Mechanism (CDM) as means to reduce greenhouse gas emissions</li> </ul> To this end, EXERGIA assessed the quality of the final technical reports of the five (5) projects implemented under the EEP and provided the EU Delegation with a sound basis for approval or rejection of the above mentioned reports.	
<b>Description of actual services provided by your staff within the assignment:</b> <ul style="list-style-type: none"> <li>➤ Comprehensive assessment of the 5 final technical reports;</li> <li>➤ Development of clear criteria for the assessment of the reports;</li> <li>➤ Provision of detailed comments and recommendations for each report assessed;</li> <li>➤ Advice EU Delegation on the quality of the reports.</li> </ul>	

<b>Assignment name:</b> Evaluation of proposals for the ACP-EC Energy facility	<b>Approx. value of the contract (in current US\$):</b> 28,414
<b>Country:</b> Kenya <b>Location within country:</b> Nairobi	<b>Duration of assignment (months):</b> 5
<b>Name of Client:</b> EC Delegation in Kenya	<b>Total N° of staff-months of the assignment:</b> 2
<b>Contact Person, Title/Designation, Tel. No./Address:</b>	

<b>Start date (month/year):</b> 11/2006 <b>Completion date (month/year):</b> 04/2007	<b>No. of professional staff-months provided by your consulting firm/organization or your sub consultants:</b> 2
<b>Name of associated Consultants, if any:</b> COWI	<b>Name of senior professional staff of your consulting firm/organization involved and designation and/or functions performed:</b> T. Goumas, K. Batos
<b>Description of Project:</b> The overall objective of the ACP-EC Energy Facility is to contribute to achieving the Millennium Development Goals, in particular the goal on poverty, through increased access to energy services by the poor rural population. This is to be achieved by improved access to modern energy services by poor rural people; improved governance and management in the energy sector; facilitation of future large-scale investment programmes in cross-border interconnections, grid extensions and rural distribution. The facility is periodically requesting proposals for potential projects contributing to its objectives. Within this project, EXERGIA provided technical support in evaluating these proposals for Kenya and partly for cross-border projects including Kenya.	
<b>Description of actual services provided by your staff within the assignment:</b> <ul style="list-style-type: none"> <li>➤ Review of programme objectives and evaluation guidelines;</li> <li>➤ First screening of potential projects by evaluation of concept notes;</li> <li>➤ Full evaluation of proposals;</li> <li>➤ Liaison with the EC delegation and reporting.</li> </ul>	

<b>Assignment name:</b> Capacity building in Wind Energy and Concentrating Solar Power in Jordan (WECSPP Project)	<b>Approx. value of the contract (in current US\$):</b> 332,786
<b>Country:</b> Jordan <b>Location within country:</b> Amman	<b>Duration of assignment (months):</b> 20
<b>Name of Client:</b> EC Delegation in Jordan/ Ministry of Energy & Mineral Resources (MEMR)	<b>Total N° of staff-months of the assignment:</b> 12
<b>Contact Person, Title/Designation, Tel. No./Address:</b>	
<b>Start date (month/year):</b> 07/2014 <b>Completion date (month/year):</b> 03/2016	<b>No. of professional staff-months provided by your consulting firm/organization or your sub consultants:</b> 12
<b>Name of associated Consultants, if any:</b> COWI	<b>Name of senior professional staff of your consulting firm/organization involved and designation and/or functions performed:</b> E. Alassis (key expert), G. Vlondakis (quality supervision)

**Description of Project:**

This project refers to a part of the larger WECSP (Wind & CSP plants) project. The WECSP project is the first renewable energy project in Jordan that is funded by the European Union (EuropeAid Project). The aim of this part of the WECSP project is to accomplish / complement the Technical Assistant work done in the first part of the WECSP project (2011 -2013), and implement the current contracted Concentrated Solar Power (CSP) facility. The overall objective is to support the rational and sustainable use of alternative energy resources in Jordan and more specifically to support the National Energy Research Centre (NERC) to steer and facilitate the implementation of the Jordanian Government Renewable Energy Strategy 2007-2020.

Overall, within the WECSP project, the first Wind Energy (1,65MW) & Concentrated Solar Power Plant “ CSP” (1 MWe) in Jordan was realized.

In the course of this project, the Consultant provided support to NERC in design, valuate, commission and O&M PV and Wind project in Jordan.

**Description of actual services provided by your staff within the assignment:**

- Installation and connection to the grid of Wind Pilot Plant and Jordanian Wind Turbine Testing Laboratory (JWTTL)
- Installation and connection to the grid of CSP Pilot Plant and Jordanian Concentrating Solar Power Testing Laboratory (JCSPTL)
- Support NERC to set up and accredit wind and CSP testing facilities / Support NERC to set up wind and CSP testing facilities
- Support for the Power Purchase Agreements
- Awareness and capacity building in solar and wind energy areas: Technical Needs Assessment for Solar Energy (CSP) and Wind Energy and Training Package preparation
- Activities to enhance Private sector participation

## 3 TECHNICAL AND MANAGERIAL CAPABILITIES OF THE CONSULTANT

### 3.1 Technical Infrastructure

---

EXERGIA's premises are in Athens. The offices include experts' workstations, meeting rooms, library and administrative facilities. EXERGIA possesses a range of computer facilities, designed to provide adaptability and flexibility for a variety of working environments. Beyond the advance and up to date computer and peripherals infrastructure which is available, comprising fully-equipped workstations interlinked with Windows NT-server, laptops, printers, photocopiers, scanners etc., the company's technical infrastructure includes has a A0 color CAD plotter.

EXERGIA is also using:

- Engineering software for statistical and econometric analysis, including all the popular software packages for word-processing, computer graphics, spreadsheets etc;
- Special software simulation and modelling tools developed per se for each client (i.e. electricity market simulation model, demand forecasting models, software for electricity tariffs and load analysis, software for investment appraisal, software for EE and renewables analyses, etc.);
- Buildings dynamic energy simulation software (EDSL TAS, DesignBuilder), other energy performance of buildings software (ENSI, iSBEM), engineering software for HVAC studies, software packages for statistical, econometric analysis and solar thermal simulation (T\*SOL);
- Computational fluid dynamics (CFD) simulation software (Envimet) for microclimate modelling in the context of bioclimatic design of open spaces;
- Mechanical and architectural design software (AutoCAD);
- Geographic Information Systems (GIS) software (ArcGIS);
- Audit measuring equipment for field energy and environmental measurements, such as electrical analysers, thermographic camera, data loggers, surface and other types of thermometers, power analyser and meters, gas analyser, lux meters, etc.
- Special accounting system for the financial department and for the company's performance monitoring, etc.

The personnel of EXERGIA use all the popular software for the support of the projects (MS Office, MS Project, etc.) as well as software for development of specific studies.



## 3.2 Technical Capabilities

---

### General Capabilities

The Consultant offers a variety of technological services oriented to the business, adapted to the necessities of each client, and based in modules that have been developed during the last 20 years. The Consultant offers specialized consulting in the design and development of technology implementation plans ensuring the results for the involved company/ institution. The guarantee of success in the proposed solutions is based on:

- The application of processes analysis tools developed during his years of experience in business management.
- The creativity of the given solutions based on original production processes and new business models.
- Knowledge of the markets and the most international advanced technologies with proven business results.
- His ability to work on largely diversified projects, both on-site and off-site
- His performing area covers Europe, Mediterranean, Africa, Asia, etc.

The Consultant offers a range of products adapted to each client's profile with individual packages that cover timely intervention in consultancy specializing in design, measuring, calculation and/ or management of energy and environmental projects.

### Staff Capabilities

The Consultant is staffed with a multi-discipline team of experienced consultants, engineers and scientists with post graduate studies at both MSc and PhD levels. Apart from their strong academic background and working experience, they have developed specialized skills and received relevant certifications in the fields of energy and environment.

**In this context, EXERGIA's staffing includes the following expertise:**

- Registered Evaluator in the European Evaluation Society.
- Licenced Assessors in Building Research Establishment Environmental Assessment Method (BREEAM) for the construction of new buildings and refurbishments worldwide (International New Construction Scheme).
- Certified Environmental Management Systems (EMS) Auditor and Lead Auditor, as well as Occupational Health & Safety Management Systems (OHSMS) Auditor.
- Certified Engineers within the National Register for the elaboration of specialized studies (holders of 1st - 3rd class certificates for Environmental Impact Assessment and other studies).
- Formally trained experts in the use of GIS and CAD design software.
- Skilled experts in Project Management and Business Administration.
- Certified Energy Auditors within the National Register etc.

In addition, it is worth noting that Consultant's staff is highly proficient in spoken and written English, having also good working knowledge of French, German, Italian, Spanish and Russian.

Moreover, the company's Administrative and Financial Departments, along with in-house technical and IT assistance, quality management functions and legal advice, provide continuous support to the experts' work, ensuring proper operation of the company's activities and effective backstopping services.

### 3.3 Managerial Capabilities

---

As above mentioned, EXERGIA applies a quality management system certified according to ISO 9001:2008. The company fully adopts the standards' quality management principles and applies them into the services it provides, as well as to its day-to-day management. These include:

- Customer focus;
- Leadership;
- Involvement of people;
- Process approach;
- System approach to management;
- Continual improvement;
- Factual approach to decision making;
- Mutually beneficial supplier relationships.

The Consultant's staff is well trained in the implementation of ISO 9001 standard and the application of the respectively certified system, guaranteeing the quality of the provided services to the client.

EXERGIA also has strong experience in working on behalf of different IFIS and is therefore well-acquainted with the respective management procedures, guidelines and manuals. Its staff has sound knowledge and broad experience in the application of Project Cycle Management (PCM) techniques in all projects stages in accordance with EC "Project Cycle Management Guidelines" for aid delivery as well as in the Logical Framework Approach. In this respect they follow closely the management scheme of Programming – Identification – Formulation – Implementation – Evaluation & Audit. As far as it regards project evaluation, they are well acquainted with the standard evaluation criteria endorsed by OECD-DAC, comprising Relevance – Efficiency – Effectiveness – Impact – Sustainability. In the same context, the company is experienced in working with and managing projects on behalf of the World Bank, following WB's Guidelines: Selection and Employment of Consultant.

In all cases, during the management of a project particular emphasis is put in data collection and management. Thorough mapping of all collected data and relevant

documentation is performed by feeding them in a dedicated database to be managed and updated throughout all the project life, ensuring in this way identification of key issues and maintenance of a full record of the information used for future reference.

Summing up, the Consultant holds strong project management skills as a result of long working experience in the management of large-scale projects, involving multidisciplinary teams of experts. It has strong ability to work in multicultural environments – acquired while working in international projects with experts from different countries – resulting in flexibility in working in different environments. Such capacities have been developed during the Consultant's presence in developing countries in different regions worldwide. During the past 20 years, the **Consultant has managed successfully more than 500 significant energy, environment and water projects** with focus on developing countries of Central and Eastern Europe, the Mediterranean, Africa and the Middle East Countries.

Last but not least, the Consultant has an extensive international network with technology and consulting companies, research centers, universities, as well individual experts in several countries. Additionally, the Consultant maintains a national network of partners consisting of SMEs and research groups.

It can be therefore concluded that the Consultant has proven expertise in managing similar projects financed by various categories of clients, being fully familiar with processes, needs and requirements per client category.

## 4 DESCRIPTION OF APPROACH, METHODOLOGY AND WORK PLAN

### 4.1 Technical Approach and Methodology

The Consultant will carry out an end-term evaluation to assess the performance of MINARET, through assessing the program's relevance, achievements against MINARET's objectives, as they have been initially set, and any other results. The main purpose of the Project includes, also, identification of key lessons learnt and practical recommendations that may help improve the design and implementation of future or of a possible phase (Phase II/ New Project) to serve the requirement of Swedish Development Cooperation.

The data collection sources will be typical for this type of evaluation exercises and are expected to include:

- Structured interviews with relevant stakeholders, either in-person or by telephone, given the significance and the availability of interviewees during the on-site data collection period
- Documents with desk reviews and analyses prepared for MINARET, surveys and secondary data analyses, including also the Implementation Plan, the Project Supervision Reports and supporting evidence, the Clients Surveys, the mid-term evaluation report, etc.

#### 4.1.1 Proposed Project Structure

The Consultant proposes the evaluation to be structured into the following three Tasks:

- Task 0: Project Management,
- Task 1: Inception Phase,
- Task 2: Data collection and analysis
- Task 3: Drafting and Finalization of the Final Evaluation report.

#### 4.1.2 TASK 0: Project Management

Day-to-day project management will be undertaken by **Dr. Theodor Goumas**, the proposed **Team Leader**. He has long-term experience in the field of energy, evaluation experience and excellent knowledge and understanding of the regional context.

#### Scope of work

The scope of this task is:

- To carry out the project according to the ToR, the Contract and under the guidance of the Client (RSS/NERC);

- To formulate, practise and monitor an effective management scheme that will ensure that all activities and the project are implemented according to the agreed specifications on time and in superior quality;
- To provide guidance, direction to the team and to supervise experts' work;
- To manage logistic arrangements according to the prevailing rules.

### **Coordination of project implementation**

During the implementation phase, the Team Leader will:

- exercise professional day-to-day management and strict control over the project implementation and coordination;
- mobilise, instruct and guide the experts so as to ensure consistency of work and compliance to the agreed work plan;
- report regularly to the RSS/NERC on all issues pertaining to project implementation (progress, guidance on key strategic matters, project work plan, etc.);
- ensure that all formal procedures foreseen in the contract are carried out without deviations and the rules and conditions are met.

## **4.1.3 TASK 1: Inception Phase**

### **Scope of Work**

The objective of this Task is to fully understand the program's objectives and expected outcomes by taking into account all available documentation and the Client's guidelines and better adapting the approach of work and time schedule.

At Day 1 of the Project after contract award, which will also mean the initialization of the Inception Phase, the Consultant will mobilize the experts engaged on the assignment, including backstopping experts and staff.

### **Activity Description**

#### **Subtask 1.1 Start-up meeting**

Following communication and agreement with the RSS/NERC, the Consultant will organize the **Start-up meeting through phone/ video conference** with the participation of the RSS/NERC and all three members of the Consultant team.

The objective of the teleconference will be inter alia:

- To review the ToR and the required deliverables in detail in order to identify any potential adaptations needed, and the way to respond to such adaptations;
- To review the methodology and the approach proposed by the Consultant in order to integrate likely modifications proposed by the RSS/NERC;
- To discuss on material available to RSS/NERC that would facilitate the Consultant in performing the assignment;

- To review the project timeline and any potential remarks and issues raised by the RSS/NERC.

### **Subtask 1.2 Drafting of the Inception Report**

This sub-task will be initiated with desk research, where the Evaluation Team will collect and analyze the whole relevant background documentation related to the MINARET program, such as project activities reports, Implementation Plan, Project Supervision Reports and supporting evidence, other reports that contain information about the key activities implemented by the Program, as well as Client surveys. Logical frameworks and M&E reports will be exploited, where available, which apart from the project objectives, results and activities, shall include objectively verifiable indicators of achievement, sources and means of verification (e.g. reports, databases, etc.) and other assumptions/preconditions.

The evaluation areas refer to the quality of programme design, the impact of its activities, its overall management and coordination, the adequacy of the knowledge management mechanisms and communication tools, as well as its sustainability prospects for future retention of its results. Following, the evaluation areas will be further developed into suitable evaluation questions. Examples of evaluation questions, within project performance efficiency and effectiveness for instance, are the targeting beneficiaries' approach, the quality control mechanisms that are applied, the project efficiency and effectiveness based on performance indicators, as well as on cross-cutting issues. Degrees of compliance can be selected and used in this methodology as far as it regards the compliance assessment of each evaluation area, and in compliance to the standards of RSS/NERC.

Building on the finding of the literature review, the Evaluation Team will analyze and interpret them, applying the evaluation areas considered in the ToR: Relevance, Effectiveness, Impact. Assessment may be performed against questions, already set in the ToR, but also on the analyses of them in sub-questions, which will be finally used in the interviews. The evaluation matrix will be the result of this analysis, including evaluation areas – questions – sub-questions but also potential indicators and potential sources of information to be searched. The draft evaluation matrix will be proposed by the Project Team in the Inception Report, bringing together the evaluation areas, the verifiable indicators and the evaluation questions, as well as the list of interviews with relevant organizations being involved (e.g. competent authorities, beneficiaries, other stakeholders, etc.).

The Inception Report will present at least the following:

- Evaluation approach/ methodology,
- Methods for data collection,
- Methods for analysis, and
- Specific workplan, including number of hours/working days.

For drafting of the Inception Report, the following steps will be followed:



- Collection of the evaluation documents, organization them in files and in a project website to be accessible by the evaluation team.
- First reading of the documents and identification of the sensitive evaluation areas.
- Checking of the evaluation questions, potential amendments on the existing set of questions and further analysing them in sub-questions.
- Preparation of the draft Evaluation Matrix to be approved by the RSS/NERC Project Manager through the Inception Report.
- Preparation of the Inception Report including the Evaluation Matrix and the Schedule of the project and submission of the Inception Report for approval.
- Receive of RSS/NERC comments, remarks and finalize Inception Report by including amendments.

### Subtask 1.3 Finalization of the Inception Report

Upon submission of the Draft Inception Report, the Consultant should receive feedback from the Client in order to finalize the Inception Report.

### Expected Outcomes

It is expected the start-up meeting will mean the initialization of the Project. This will result in the drafting and finalization of the Inception Report.

No.	Name of deliverable	Objective	Duration Time
D.1	Start-up meeting	Initialization of the Project, discussion of the	1 October 2020
D.2	Draft Inception Report	Presentation of the Evaluation objectives, the theory of change, the proposed methodology, an evaluation matrix, list of interviews.	15 October 2020
D.3	Final Inception Report	Incorporation of the feedback received from the Client.	20 October 2020

### Mobilisation of Resources

The working days foreseen for the implementation of Task 1 are the following:

Name of Expert	Working Days
Dr. Theodor Goumas	5
Mr. Emil Alasis	5
Ms. Nicoletta Metaxatos	5

#### **4.1.4 TASK 2: Data collection and analysis**

##### **Scope of Work**

The objective of this Task is to carry out the necessary interviews and elaborate the collected information by all sources in order to support the answers to the evaluation questions in each evaluation area set in the ToR. In accordance with the Evaluation Matrix and the Project Plan the Consultant will organize the on-site (field) missions and the necessary interviews in person (assuming that travel restrictions to the three destinations have been lifted) and/or by phone. The information collection in the interviews will be combined with the information coming from the program documents, thus providing the elaborated material, which responds to the evaluation questions.

This task involves the further elaboration of the evaluation matrix due to a more detailed analysis of the available documentations, which might take place before and after the execution of the field work. All three proposed evaluators will share effort in the detailed assessment of the program documents under the guidance of the Team Leader, who will have the overall control of the assessment.

##### **Activity Description**

##### **Sub-task 2.1: Data collection**

The data that have been collected during the Inception Phase will also be analysed further during this sub-task. In addition, the Consultant is required to travel to 3 destinations (Al-Karak, Jordan – Monastir, Tunisia – Jdaidet El Chouf, Lebanon) in order to conduct the interviews formulated during the Inception Phase, with the Programme's officials in each country.

Given the current situation and the travel restrictions that exist due to Covid-19, the Consultant has ensured a Senior Expert that is based in Jordan and will be able to conduct all interviews in person. Regarding the remaining two destinations, Tunisia and Lebanon, the Consultant suggests that all field work will be done remotely, through internet or by phone.

At the end of this sub-task, a debriefing/validation meeting will be organized in order to present and discuss with the RSS/NERC all the material collected before proceeding to the analysis and drafting of the Final Evaluation Report.

##### **Sub-task 2.1: Data analysis**

The Project Team will ensure that all assessments and reviews are objective and balanced and that the affirmations are accurate and verifiable with realistic, operational and pragmatic recommendations. For this reason, a database of collected information will be prepared in order to support the assessments for each evaluation area and question. This approach has been implemented in other similar evaluations with success. Furthermore,

each operational recommendation will be accompanied by a clear description of its implementation.

### Expected Outcomes

During this Task, the interviews and field missions are expected to take place.

No.	Name of deliverable	Objective	Duration Time
D.4	Data collection	Field missions, Interviews to collect all necessary material for the evaluation	28 October – 15 November 2020
D.5	Debriefing/validation meeting	Presentation of the collected data to RSS/NERC to validate them and proceed to the analysis	17 November 2020

### Mobilisation of Resources

The working days foreseen for the implementation of Task 1 are the following:

Name of Expert	Working Days
Dr. Theodor Goumas	10
Mr. Emil Alasis	11
Ms. Nicoletta Metaxatos	8

## 4.1.5 TASK 3: Drafting and Finalization of the Final Evaluation Report

### Scope of Work

The objective of this Task is the preparation of the Final Evaluation Report. The Evaluation Report will be according to the Sida Decentralised Evaluation Report Templet (Annex B as attached to the ToR).

Building on the findings of the detailed MINARET literature review and the collected market material that will take place during Task 2, as well as the findings from the interviews carried out during the field mission and by phone, the Project Team will analyze and interpret them, in response to the evaluation areas considered in the ToR and agreed in the Inception Phase. Furthermore, based on the above analysis, emphasis will be placed on the composition of specific chapters with lessons learned, conclusions and recommendations. Degrees of compliance can be selected and used in this methodology as far as it regards the compliance assessment of each evaluation area, according to the RSS/NERC standards.

All reporting will be performed by the Project Team following common presentation methodologies and techniques. The draft Evaluation Report, including consolidated assessments findings and recommendations will be submitted for comments to the RSS/NERC experts for comments and remarks.

The final version of the Evaluation Report and the Executive Summary will be consequently prepared by the Evaluation Team, incorporating remarks and comments made on the draft reports and will be submitted to the RSS/NERC for approval.

The Project Team will ensure that all assessments and reviews are objective and balanced and that the affirmations are accurate and verifiable with realistic, operational and pragmatic recommendations. For this reason a database of collected information will be prepared in order to support the assessments for each evaluation area and question. This approach has been implemented in other similar evaluations with success. Furthermore, each operational recommendation will be accompanied by a clear description of its implementation.

### Activity Description

The implementation steps to be followed in the Task of “Drafting and Finalization of the Reports” will be:

- Synthesis of MINARET literature assessment, market material and interviews findings to reply to the evaluation questions.
- Preparation of the draft Evaluation Report and submission to RSS/NERC for comments and remarks.
- Incorporation of amendments based on RSS/NERC remarks and preparation of the final version of the Evaluation Report.

### Expected Outcomes

The following deliverables are expected to result from this Task.

No.	Name of deliverable	Objective	Duration Time
D.6	<b>Draft Evaluation Report</b>	Findings for each of the evaluation criterion, conclusions, executive summary, recommendations and lessons learned.	4 December 2020
D.7	<b>Final Evaluation Report</b>	Findings for each of the evaluation criterion, conclusions, executive summary, recommendations and lessons learned.	10 December 2020

**Mobilisation of Resources**

The working days foreseen for the implementation of Task 1 are the following:

Name of Expert	Working Days
Dr. Theodor Goumas	5
Mr. Emil Alasis	4
Ms. Nicoletta Metaxatos	3

## 4.2 Work Plan

N°	Task	Weeks									
		1	2	3	4	5	6	7	8	9	10
Tasks											
0	Project Management										
1	Inception Phase										
2	Data collection and analysis										
3	Drafting and Finalization of the Final Evaluation report										
Deliverables											
D.1	Start-up meeting										
D.2	Draft Inception Report										
D.3	Final Inception Report										
D.4	Data collection										
D.5	Debriefing/validation meeting										
D.6	Draft Evaluation Report										
D.7	Final Evaluation Report										

## 5 ORGANIZATION AND STAFFING

In this section, the structure, composition and qualification of the project team, comprising key and backstopping experts, is described. The Consultant has ensured the commitments of a team of high-level experts with significant international and local-based experience on **conducting end-term, mid-term and ex-ante evaluations of energy- and or environment-related programmes, as well as experience in the RES, Energy Efficiency, environmental and water management, food security**, etc. and have the ability to complement each other according to the project's needs. Furthermore, the Consultant has **excellent knowledge of the regional situation**, having worked in numerous projects in the region.

### 5.1 Presentation of Project Team

---

For the successful management and implementation of the project, the formation of a strong and highly qualified team of key experts, who complement each other, is composed. The Consultant proposes two senior and one junior expert for the implementation of this Project. This arrangement ensures maximum flexibility in project implementation and achievement of expected results, should the project schedule be revised following the findings of the inception phase.

The qualifications of the key experts proposed are presented in the following paragraphs. Full curriculum vitae of the key experts can be found in Annex 2. The proposed team is characterized by the following strong points:

- **High calibre expertise.** The Project Team possesses large professional experience obtained through the implementation of several projects worldwide on topics related to the contract scope. Its members have worked as professional consultants and key officials in evaluating energy and environment programmes.
- **Knowledge of the regional context.** Both Senior Experts proposed, have extensive and long-term experience on the region. Dr. Goumas and Mr. Alasis have worked extensively on projects in Jordan and have successfully collaborated with the local government. They both have excellent understanding of the local energy, social and environment markets.
- **Membership in Evaluation Society.** The proposed Team Leader, Dr. Goumas, is member of the European Evaluation Society.
- **Key involvement/Role in a recent evaluation.** Each proposed expert has undertaken many evaluation assignments, in most of them as Team Leaders, from international donors with a solid track record of successfully conducting similar evaluations the last 5 years.



- **Competent use of data collection, statistical analysis and sound evaluation techniques, including software tools.** All experts are very experienced in methods and tools used in evaluation exercises, including conducting quantitative and qualitative evaluations.
- **Excellent analytical skills.** All three key experts have accumulated long experience as senior consultants and developed strong analytical skills and technical knowledge of development project cycle management.
- **Ability to conduct general and technical discussion in Arabic language.** Mr. Alasis is a Senior Expert who is fluent in Arabic.

Table 5-1 presents the above-mentioned compliance of qualifications by the proposed experts.

**Table 5-1 Qualifications of the Key Experts**

Qualifications	Dr. Theodor Goumas- Team Leader	Mr. Emil Alasis – Senior Evaluator	Ms. Nicoletta Metaxatos – Junior Backstopping Expert
Experience in the regional context, energy, climate change, water, as well as renewable energy market	✓	✓	
Member of an Evaluation Society or Association of International Repute	✓		
Recent involvement in successfully conducting similar evaluations	✓	✓	✓
Familiar with quantitative and qualitative evaluation	✓	✓	✓
Use of data collection, sound evaluation techniques and statistical analysis	✓	✓	✓
Excellent analytical skills	✓	✓	✓
Availability and full commitment for the assignment	✓	✓	✓
Fluency in Arabic		✓	

Dr. Theodor Goumas will be the Project's Team Leader. He will also be the contact person for the Client, responsible for quality assurance and timely submission of deliverables, applying the standard procedures of EXERGIA for executing international projects, which are certified to EN ISO 9001:2015. He will manage the contribution of the project experts and ensure that the project requirements are met appropriately. In general, he will lead and guide the whole project.

Dr. Goumas is proposed as **Team Leader** due to the following reasons:

- He has accumulated **large experience as Team Leader or Project Director through managing** or participating in multi-disciplinary Technical Assistance projects in the energy sector in the MENA region, EU, CIS countries, Balkans, SE Asia and elsewhere, and therefore he possesses in depth knowledge of the procedures and rules of project management.
- He has participated as **Team Leader and Key Expert in various projects in CIS countries** since 1991. He has recently completed an energy project in Ukraine. In this context, he has deep knowledge of the MENA energy sector and its specificities and he is familiar with stakeholders in the energy and environment sectors.
- He has vast professional experience of over 35 years covering all aspects of the project, **including evaluation of energy and environmental programs**, requiring extensive experience in energy policy, renewable energy, etc.

#### Project team experts

The role of the experts in the project includes:

- **Day to day work on Tasks and preparation of technical deliverables** according to their field of expertise.
- Participation in all of the required meetings and the interviews.

## 5.2 Presentation of Experts

The section below presents the qualifications of all experts proposed:

### Dr. Theodor Goumas – Team Leader

Dr. Goumas holds a PhD in energy policy and has over 30-years energy consulting experience worldwide. He has managed successfully, as Team Leader, more than 40 projects, many of which, equivalent to more than 12 years' work effort, were related to renewables, energy efficiency and climate change policies. More specifically he has consulted and collaborated with policy makers of the EC, International Organizations, Ministries, Energy Agencies on a variety of energy policy issues, in the areas of major energy infrastructure projects, renewables, energy efficiency, climate change, markets liberalisation etc. In this context, he has prepared many project evaluations and reviews in the framework of various initiatives and programmes for the European Commission and the World Bank. Also, he is **registered evaluator in the European Evaluation Society and has worked on a considerable number of project and program evaluations**, some of which

in the areas of **renewable energy matters, energy efficiency, climate change**, support to various authorities on renewable energies and energy efficiency in the framework of various initiatives under international donating organizations.

His experience also covers the MENA region, where he has participated as Key Expert in numerous internationally funded projects in Jordan, Lebanon and other countries in the region. He has therefore gained significant experience in the region and has collaborated with all the regional public and private market actors, where he also provided capacity building activities to the local governments on issues related to energy, covering RES and EE. More specifically, in 2016, he successfully completed the **final evaluation** for the **Renewable Energy and Energy Efficiency Programme in Jordan (2012-2016)**, where he **held the position of the Team Leader and Main Evaluator** and was responsible for the evaluation of Renewable Energy and Energy Efficiency actions in all sectors of the country. During this project he gained significant experience in the country's energy sector, collaborated with the country's officials and main market actors. The project involved the evaluation of the implemented activities of RES/EE actions and of the financing management capacity for the RES/EE program.

Relevant to his experience as an Evaluator, he is currently the EU Energy Policy Expert, for the EC DG CLIMA Project, **“Support Study on Evaluation of Article 7a of the Fuel Qualitative Directive and assessment of approaches to reduce Greenhouse Gas emissions from transport fuels”**, responsible for the evaluation of the Directive on its Effectiveness, Efficiency and EU added value, including impact assessment step of problem definition, baseline development and policy option analysis. In addition, he was an evaluator for the GIZ framework, **“Central project evaluations: Energy”**, under which he was the Team Leader on the **“Final Evaluation of the Renewable Energy and Energy Efficiency Programme, Bangladesh”**.

He was the Team Leader and Main Evaluator of the **“Final and Mid-Term Evaluation of the "Europe-China Clean Energy Centre" (EC2-PROJECT)”**, where he assessed whether the project achieved the initially agreed objectives and results through the planned activities, as well as the **efficiency and effectiveness with which resources have been used to generate results and achieve project objectives with special emphasis on impact and sustainability**. In Greece, he was appointed by the Ministry of Economy as on-going and ex-post evaluator of the Operational Energy Programme of the 2nd EU Community Support Framework (1997-2000) on rational use of energy (RUE) programmes and ex-ante evaluator of the energy sector of the 3rd EU Community Support Framework (CSF) Programme (2000-2006). In addition, he was on-going evaluator of the energy part of the CSF program (2007-2013) focusing on measures and programs in energy efficiency and renewable.

He has sound knowledge and recent implementation experience of the evaluation guidelines of the international financing institutions and the OECD criteria of relevance, effectiveness, efficiency, sustainability, and impact. He combines also good technical and legal knowledge of **RES and energy markets** and has participated in the technical and

economic evaluation of more than 50 renewable energy projects on behalf of investors in the period 2006-2009.

#### Mr. Emil Alasis – Senior Evaluator

Mr. Alasis is an Arabic speaking expert and he has more than 30 years of experience in the area of **RE and EE projects development**. Throughout his professional career, he has worked on a scientific basis on research, evaluation, development, supervision, installation, construction, commissioning and operation of projects and investments of renewable energy sources (RES) as well as EE and saving ones. Moreover, he has been **involved in the elaboration and preparation of technical, economic, feasibility, grid connection and environmental studies**. Emil has also worked on **developing the RE investment regulations in Greece** in close cooperation with the Hellenic PV Companies Association (HELAPCO). He has been responsible and lead Engineer for the design and preparation of electrical and mechanical drawings of RE (wind –PV and Hybrid) projects as well as for the environmental impact assessment (EIA) studies of these projects.

He also possesses experience in evaluating RES technologies, as well as EE programs, mostly in Jordan. He has **advanced evaluation skills and experience in project monitoring and evaluation** in the fields of energy and environment. He has long-term experience in collaborating with **Jordan's public and private stakeholders of the energy and environment sectors** and he is familiar with the regional institutional and policy frameworks.

In all the companies he worked for, he was **technical manager and team leader responsible for the planning, design, supply, installation and operation of RES and EE projects**, such as Photovoltaic, Wind, Concentrating Solar Power (CSP), Hydro, Biomass as well as EE in buildings and hybrid projects. He is active for more than 15 years in RE and EE capacity building and training activities, especially in technical and energy courses. Finally, he has acquired extensive experience in design, study and licensing of several autonomous and grid-connected small and large size wind power plants.

Mr. Alasis has participated in **several consulting projects and to many of them being the team leader**, e.g. in the EuropeAid projects: "Capacity Building in Wind Energy and Concentrating Solar Power (CSP)" and "Renewable Energy and Energy Efficiency Programme -REEE II TA- in Jordan". Further, he was Technical Advisor of the National Energy Research Centre (NERC) in Jordan in designing, **evaluating** and commissioning PV and Wind projects, such as on-grid PV system capacity 40 MWp of the University of Jordan and on-grid 770 KWp of the University of Philadelphia and 100 MW wind park south of Jordan and others PV and Wind projects. Finally, he has **more than 12 with extensive experience in RE and EE capacity building, education, training**, especially in technical and energy courses and participation in the supervision of more than 50 of dissertations.

Recently, he was the Team Leader of the Renewable Energy and Energy Efficiency Programme "REEE II TA" in Jordan, funded by the EU. The overall objective of the project is to contribute to the development and implementation of effective policies that would help Jordan reach its renewable energy and energy efficiency (REEE) targets for 2020.

## Assistant Expert

In addition to the above Senior Experts, the Consultant proposes one Junior Expert:

**Ms. Nicoletta Metaxatos** is a Civil Engineer with post-graduate studies in Hydrology and Water Resources Management. She is currently doing her master's degree in Finance, focusing on Risk Management. For the past five years she participates actively in various local and international energy and environment project, with main focus on projects related to EE and RE. She has been involved in the execution of a number of energy and environmental projects in Greece or internationally. Indicatively, she has participated in various projects concerning the evaluation, mainly ex-post evaluations, of energy programmes internationally, and she is familiar with the methodology for evaluating projects. Through these projects, she has gained experience in the evaluation guidelines of the international financing institutions and the **OECD criteria of relevance, effectiveness, efficiency, sustainability, and impact**.

She is currently backstopping expert in the EC DG CLIMA Project, **“Support Study on Evaluation of Article 7a of the Fuel Qualitative Directive and assessment of approaches to reduce Greenhouse Gas emissions from transport fuels”**, assisting in the evaluation of the Directive on its Effectiveness, Efficiency and EU added value, including impact assessment step of problem definition, baseline development and policy option analysis, through participating in the interviews with the market players and assisting in the development of the log-matrix and in the formulation of the questions for the interviews with the officials. Furthermore, related to the field of energy, she participated in the GIZ framework assignment as backstopping expert, **“Final Evaluation of the Renewable Energy and Energy Efficiency Programme (REEEP)”**, where she provided support to the Team Leader for the review of all documents related to the REEEP in order to construct the Evaluation Matrix and evaluate the Programme. She has also contributed to the preparation of environmental and social impact assessments for route modifications of the TAP high-pressure natural gas pipeline in Greece as well as to drafting of the relevant forest reinstatement studies. She has worked on drafting the ESIA for the Kafue Gorge small hydro power plant in Zambia, by **collecting desktop information and drafting the environmental and social baseline**. She also works on the preparation of tenders for European Commission or other IFI projects (EBRD, EIB, KfW, WB, etc.) in the fields of energy and the environment.

## ANNEX 1: QUALITY ASSURANCE CERTIFICATE



# CERTIFICATE

## Management System as per EN ISO 9001 : 2015

In accordance with TÜV AUSTRIA procedures, it is hereby certified that

**EXERGIA**  
**ENERGY & ENVIRONMENT CONSULTANTS S.A.**  
**15, Voukourestiou Str.**  
**GR- 106 71 ATHENS, GREECE**

Applies a Quality Management System in line with the above Standard for the following Scope

**CONSULTING SERVICES IN ENERGY AND ENVIRONMENT.**

Certificate Registration No.: **20001190001240**

Valid until: 2022-02-25  
Initial certification: 2018-02-26



Nikolaos Sifakis  
Head of Management Systems & Products Certification Division  
Certification Body  
at TÜV AUSTRIA

Athens, 2019-02-26

This certification was conducted in accordance with TÜV AUSTRIA auditing and certification procedures and is subject to regular surveillance audits.

TÜV AUSTRIA HELLAS  
429, Mesogeion Ave.  
GR-153 43 Athens, Greece  
[www.tuvaustriahellas.gr](http://www.tuvaustriahellas.gr)



CePRK478\_A1e

Headquarters in Athens bear the responsibility of the Certification decision



**TÜV AUSTRIA**  
GROUP

# CERTIFICATE

## Management System as per EN ISO 27001 : 2013

In accordance with TÜV AUSTRIA procedures, it is hereby certified that

### **EXERGIA ENERGY & ENVIRONMENT CONSULTANTS S.A.**

**15, Voukourestiou Str.  
GR- 106 71 ATHENS, GREECE**

Applies an Information Security Management System in line with the above Standard for the following Scope

### **CONSULTING SERVICES IN ENERGY AND ENVIRONMENT.**

Valid Statement of Applicability: **SOA VERSION 4, 10/01/2019**  
Certificate Registration No.: **20201190001241**

Valid until: 2021-02-21  
Initial certification: 2018-02-22



Nikolaos Sifakis  
Head of Management Systems & Products Certification Division  
Certification Body  
at TÜV AUSTRIA

Athens, 2019-02-26

This certification was conducted in accordance with TÜV AUSTRIA auditing and certification procedures and is subject to regular surveillance audits.

TÜV AUSTRIA HELLAS  
429, Mesogeion Ave.  
GR-153 43 Athens, Greece  
[www.tuvaustriahellas.gr](http://www.tuvaustriahellas.gr)



CePRK404\_A6e

Headquarters in Athens bear the responsibility of the Certification decision



**TÜV AUSTRIA  
GROUP**

## ANNEX 2: EXPERTS' CVS

# Curriculum Vitae

1. **Name of Staff:** Theodor GOUMAS
2. **Employer:** EXERGIA S.A.
3. **Date of Birth:** February 28, 1955      **Nationality:** Greek
4. **Education:**

School, college and/or University Attended	Degree/certificate or other specialized education obtained	Date Obtained
National Technical University of Athens (NTUA), Electric Power Division	Ph.D. on "Systemic Approach of Energy Supply: Adaptation of System Dynamics for the Identification of Generic Structures"	10/1985 – 07/ 1989
National Technical University of Athens (NTUA) Department of Mechanical and Electrical Engineering	Diploma in Mechanical-Electrical Engineering	09/1973 – 09/1978

## 5. Membership of Professional Associations:

- Hellenic Association for Combined Heat and Power
- Technical Chamber of Greece (TEE)
- Association of Electrical and Mechanical Engineers
- Greek Society of Operational Research
- European Evaluation Society

## 6. Other Training: –

## 7. Countries of Work Experience:

Country	Date from - to
Southeast Europe (Bulgaria, Croatia, FYR of Macedonia, Albania, Slovenia, Romania, Bosnia-Herzegovina, Kosovo, Montenegro)	1992- today
South-East Asia (Singapore, China, India)	1998-2002
Central & Eastern Europe (Latvia, Ukraine, Hungary, Slovakia, Estonia, Russia, Lithuania)	1990-today
CIS (Ukraine, Russia, Uzbekistan)	1992- today
Mediterranean (Cyprus, Malta, Turkey, Tunisia), Africa (Kenya, Nigeria, Egypt), Middle East (Jordan)	1997- today

## 8. Languages: (good, fair, or poor)

Language	Reading	Speaking	Writing
Greek (mother tongue)	good	good	good
English	good	good	good
German	fair	fair	fair

## 9. Employment Record:

**From:** 1991      **To:** to date  
**Employer:** EXERGIA S.A.



**Position:** Managing Director, project manager, senior consultant on energy policy and energy market projects

**From:** 1981 **To:** 1991  
**Employer:** Energy Policy Unit (EPU), National Technical University of Athens  
**Position:** Senior researcher and consultant, project manager and senior energy policy expert in energy planning, energy modelling and energy development programs

**From:** 1979 **To:** 1980  
**Employer:** Greek Air Force  
**Position:** Energy Installations Engineer, supervisor and designer of energy and electromechanical installations

#### 10. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

**Name of project:** Support Study on Evaluation of Article 7A of the Fuel Quality Directive and assessment of approaches to reduce Greenhouse Gas emissions from transport fuels

**Year:** 01/07/2020- 30/06/2021

**Location:** EU

**Client:** European Commission, DG CLIMA

**Main project features:** The objective of the project is to provide support to the Commission in relation to the following main areas of investigation, in accordance with the Commission's Better Regulation guidelines.

**Positions held:** Team Leader, Main Evaluator

**Activities performed:** Evaluating the implementation by Member States of the current Fuel Quality Directive specifically with respect to the implementation of the greenhouse gas (GHG) intensity reduction of emissions over the lifecycle of transport fuels; evaluation of the Directive on its Effectiveness, Efficiency and EU Value added, including impact assessment step of problem definition, baseline development and policy option analysis; coordination of calculations for the GHG intensity reduction stemming from the use of alternative transport fuels (incl. CNG, LNG, bio-methane, etc.); participation in stakeholders engagement activities and stakeholders workshops.

**Name of project:** Final Evaluation of the Renewable Energy and Energy Efficiency Programme (REEEP), Bangladesh

**Year:** 12/2018 - 07/2019

**Location:** Bangladesh

**Client:** GIZ

**Main project features:** The project was completed under the GIZ Framework for Central Evaluations, Energy lot. The REEEP was based on the core problem, that the conceptual basis for the dissemination of Renewable Energy (RE) and Energy Efficiency (EE) measures are not adequate. The Government of Bangladesh (GOB) sets targets for RE and EE though, the knowledge of technological applications and its business case were inadequate, so other market enabling conditions including relevant policies were necessary.

GIZ REEEP had three programme components: Renewable Energy (Output A), Energy Efficiency (output B) and the supporting capacity development of SREDA (Output C). The programme also focused on developing business cases and capacity development of service providers. Furthermore, it was envisioned that the RE and EE technologies may go in a commercial distribution by service providers with support from Government through SREDA.

## 10. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

**Positions held:** Team Leader, Main Evaluator

**Activities performed:** Evaluation Design: It was based on OECD/DAC criteria and was in compliance with the GIZ practice; i.e. the Theory of Change was visualized in a results model and the corresponding hypotheses were explained narratively within the table presenting the Results Matrix. contribution analysis and experimental approach were used.

**Name of project:** "Final Evaluation of the "Europe-China Clean Energy Centre" (EC2-PROJECT) "

**Year:** 01/2017 - present

**Location:** China

**Client:** EXERGIA S.A.

**Main project features:** The aim of the project is whether the project achieved the initially agreed objectives and results through the planned activities. The assignment's objectives also include evaluation of the process of the project's design and implementation, as well as evaluation of the relevance to the clean energy sector in China. The assignment also aims at assessing the efficiency and effectiveness with which resources have been used to generate results and achieve project objectives with special emphasis on impact and sustainability

**Positions held:** Team Leader, Main Evaluator

**Activities performed:** Helping DG DEVCO to draw lessons for the purpose of improving the design and the implementation of future related projects and programs.

**Name of project:** "Assessment of implementation of outstanding indicators of the sector budget support programme: Renewable Energy and Energy Efficiency Programme in Jordan"

**Year:** 10/2015 - 02/2016

**Location:** Jordan

**Client:** EXERGIA S.A.

**Main project features:**

**Positions held:** Team Leader, Main Evaluator

**Activities performed:** Final stage of evaluation on the accomplishment of indicators related the EU budget support program implementation actions by the Jordanian stakeholders. Formulation of recommendations and best practices for better adaptation to local conditions of forthcoming similar programs.

**Name of project:** "Study on actual GHG data for diesel, petrol, kerosene and natural gas"

**Year:** 04/2014 - 07/2015

**Location:**

**Client:** DG MOVE

**Main project features:**

**Positions held:** Project manager

**Activities performed:** Responsible for definition of the overall approach and assumptions; data gathering concerning GHG emissions from fossil fuels required for transport produced globally. Statistical analysis and manipulation of data and parameters influencing GHG emissions.

**Name of project:** "Mid Term Evaluation of the Climate Change Trust Fund (CCTF) in the Maldives".

**Year:** 02/2014 - 03/2014

**Location:** Maldives, Sri-Lanka

**Client:** EU Delegation in Sri Lanka, Government of Maldives

**Main project features:**

**Positions held:** Team Leader, Main Evaluator

**Activities performed:** Contribution to the successful implementation of the CCTF by evaluating the performance of its projects, identifying key lessons learnt and proposing suitable implementation to the Project Steering Committee. The selected funded projects comprise the

## 10. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

following: (i) Clean Energy for Climate Mitigation (CECM), (ii) Wetlands Conservation and Coral Reef Monitoring for Adaptation (WCCM), (iii) Integrated Solid Waste Management in the South Ari Atoll for Reducing GHG emissions (AASWM).

**Name of project:** "Evaluation of implementation of sector budget Renewable Energy and Energy Efficiency Programme in Jordan"

**Year:** 09/2012 - 09/2014

**Location:** Jordan

**Client:** EXERGIA S.A.

**Main project features:**

**Positions held:** Team Leader, Main Evaluator

**Activities performed:** Renewable Energy and EE actions of the Ministries of Energy and Mineral Resources and Buildings, capacity building to the program counterparts, contribution with recommendations and proposals for better implementation.

**Name of project:** "Evaluation Consultant of the Community Support Operational Program Competitiveness and Enterprising 2007-2013"

**Year:** 04/2012 - 04/2015

**Location:** Greece

**Client:** EXERGIA S.A.

**Main project features:**

**Positions held:** Energy Program Evaluator

**Activities performed:** Main on-going evaluator of the energy program of mainly energy infrastructure projects and promotion measures in electricity, gas and renewables.

**Name of project:** "Mid-term evaluation of the Europe China Clean Energy Centre (EC2) project"

**Year:** 10/2012 - 1/2013

**Location:** China

**Client:** EXERGIA S.A.

**Main project features:**

**Positions held:** Project Manager

**Activities performed:** Team Leader and main evaluator of scope, activity performance, management and effectiveness of the EC2, contribution with improvement proposals to the main stakeholders (European Commission (DGENER), National Energy Administration (NEA)) for project sustainability.

**Name of project:** "Evaluation of Projects under the Energy Efficiency Component of the EU-China Energy and Environment Programme (EEP)"

**Year:** 06/2010- 08/ 2010

**Location:** China

**Client:** EXERGIA / EC/DG External Affairs / EU Delegation in China, Beijing

**Main project features:**

**Positions held:** Team Leader, Main Evaluator

**Activities performed:** Main evaluator of final reports and contributor to the assessment review of the program. The project mainly focused on energy efficiency and CDM to reduce greenhouse gas emissions to battle climate change.

**Name of project:** Energy Framework "Pre-feasibility Study/ Dialogue Process on Nigerian Energy"

**Year:** 04/2009 - 10/2009

**Location:** Nigeria

**Client:** EXERGIA

**Main project features:** Project Director in preparing recommendations on action lines to better



## 10. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

achieve policy objectives and framework for private investments and possible support from 10th EDF funds, in consistency with the Lisbon strategy.

**Positions held:** Project Director

**Name of project:** “Promoting Climate Change Policies in Turkey”

**Year:** 01/2006 - 01/2008

**Location:** Turkey

**Client:** EC / DG Environment

**Main project features:** Key expert on energy policy design in compliance to carbon markets specifications. He especially worked in the promotion of policy formulation based on 4 low cost programs in energy efficiency and solar applications.

**Positions held:** Key Expert

**Name of project:** “Evaluation of proposals submitted under the call for proposals of the ACP-EC Energy Facility”

**Year:** 11/2006 - 04/2007

**Location:** Kenya

**Client:** EuropeAid

**Main project features:** Project manager on evaluation of around 12 renewables and EE projects to be financed by the EU in Kenya and Eastern Africa.

**Positions held:** Project Manager

**Name of project:** “Technical audit on 32 wind parks, solar and small hydro projects”

**Year:** 2006

**Location:** Greece

**Client:** ENDESA Hellas

**Main project features:** Project manager and key expert on the financial and economic evaluation.

**Positions held:** Project Manager

**Name of project:** “Technical Assistance for PIU-MEC in contracting projects for the energy sector”

**Year:** 2005-2006

**Location:** Romania

**Client:** Ministry of Economy

**Main project features:** Key expert for providing support to the Programme Implementation Unit of the Ministry of Economy and Trade in the preparation of policy and projects in energy efficiency, renewables and market restructuring to be financed under the PHARE 2006 programme.

**Positions held:** Key Expert

**Activities performed:**

**Name of project:** “Promotion of EU Biomass Technology in Agro-Industry of High Potential Third Countries (China, Uzbekistan, Turkey)”.

**Year:** 08/2001 - 06/2003

**Location:** China, Uzbekistan, Turkey

**Client:** EC/DG TREN FP5

**Main project features:**

**Positions held:** Technology Marketing Expert

**Activities performed:**

**Name of project:** “Opportunities for investing in RES for electricity generation in Greece”

**Year:** 05/2002 - 07/2002

## 10. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

**Location:** Greece

**Client:** DARING

**Main project features:** Project director and evaluator of wind, biomass and small-hydro projects.

**Positions held:** Project Director

**Name of project:** “Ex-ante Evaluation of the Greek Operational Programme- “Competitiveness” 2000-2006 of the 3<sup>rd</sup> Community Support Framework”

**Year:** 1999-2000

**Location:** Greece

**Client:** Ministry of National Economy

**Main project features:**

**Positions held:** Main Evaluator

**Activities performed:** Main evaluator of renewables and energy efficiency programs.

**Name of project:** “Participation of the EU Renewable Energy technologies in Asia”

**Year:** 1998 - 1999

**Location:** China

**Client:** EC / DGXVII

**Main project features:** Consultant on renewable project assessments and relevant cooperation of EU China on renewables implementation.

**Positions held:** Energy Market Analyst

**Activities performed:**

**Name of project:** “On-going Evaluation of the Operational Energy Programme of the 2<sup>nd</sup> Community Support Framework”

**Year:** 1997 - 99

**Location:** Greece

**Client:** Ministry of National Economy

**Main project features:** Evaluator of renewables and RUE programmes, evaluator of selective projects of renewables.

**Positions held:** Evaluator

**Activities performed:**

**Name of project:** “Formulation of the Energy Programme for Greece within the Community Support Framework”

**Year:** 1994-95

**Location:** Greece

**Client:** Ministry of Energy

**Main project features:**

**Positions held:** Senior Expert

**Activities performed:** Senior expert on the identification of sub-programmes, measures, RES and RUE projects and quantitative impacts.

## CURRICULUM VITAE

1. **Family name:** ALASIS
2. **First names:** Emil
3. **Date of birth:** 01/12/1956
4. **Nationality:** Jordanian/Greek
5. **Education:**

Institution:	Hellenic Open University
Date: from (month / year) to (month / year):	04/2012 – on going
Degree(s) or Diploma(s) obtained:	M.Sc. in Technical Constructions Management

Institution:	Aristotle University of Thessaloniki
Date: from (month / year) to (month / year):	11/1977 – 10/1984
Degree(s) or Diploma(s) obtained:	Mechanical Engineering (B.Sc. – M.Sc.)

6. **Language skills:** (Mark 1 to 5 for competence 5 being the highest)

Language	Reading	Speaking	Writing
Greek ( <i>mother tongue</i> )	5	5	5
Arabic ( <i>mother tongue</i> )	5	5	5
English	5	5	5

7. **Membership of professional bodies:**

- Technical Chamber of Greece (TEE)
- Jordan Technical Chamber, Jordanian Engineers Association (JEA)
- PV Companies Organization of Greece (HELAPCO)
- European Organization of Solar Energy (EPIA)
- Participation in organizations and conferences of The European Wind Energy Association “EWEA”
- Licensed to practice and conduct mechanical studies as a mechanical engineer with registration number 16462
- Licensed to operate and conduct studies of all kinds of specialty and categories (unlimited power) of electrical and RE installations with registration number NA - 124.
- Licensed from the Ministry of Environment, Regional Planning and Public Works / Greece to conduct the categories 9 and 27 of the Environmental Impact Assessment Studies (EIA)
- Occupier of Pan-Arab Certificated Energy Management Professional “PA-CEMP”
- Certified Trainer in Pan-Arab Certificated Energy Management Professional “PA-CEMP”
- Occupier of RETScreen
- Technical and Evaluation Committee of several of on- Grid PV projects, total nominal power more than 100 Mwp (4.0, 10.0, 40.0, 0.75, 2.0, etc. Mwp) as Technical Adviser of the National Energy Research Centre of Jordan (2016)
- Steering and Technical Committee of Jordan Energy Strategy 2019-2030 and vision 2050 (2018-2019)
- Senior Advisor on the 5Mw PV on-Grid for the Ministry of Energy and Mineral Resources in Jordan (2018 – 2019).
- Steering and Technical Committee of the Energy and Water Sectors in Jordan (2019)
- Technical Committee for evaluation and handling-implementation of the solar pumping project of the ministry of Environment - Jordan, of total nominal power of 5 Mwp (2018 – 2019).

8. **Other skills: (e.g. Computer literacy, etc.):** Excellent communication skills; Very good computer literacy (Windows, MS Word, MS Excel, MS PowerPoint, Outlook, MS Project, Rescreen, PVsyst, PV GIS, Wind farm, Financial analysis P50, P75, P90, A/CAD, Leap, evaluation results of energy planning and analysis, reading TimesModel and WASP); Working experience in energy engineering.
9. **Present position:** Independent consultant, regular associate consultant to EXERGIA and GFA
10. **Years within the firm:** Since 2005
11. **Specific regional experience:**

Country	Date: from (month / year) to (month / year)
Greece	October 1984 / present
Saudi Arabia	August 1988/ September 1988
Egypt	2007
Romania	1999
Jordan	1986 - present

## 12. Professional experience record

Duration: mm/yy to mm/yy	04/ 2016 – on going
Location:	Jordan
Client:	National Energy Research Centre
Position/expert months provided:	Technical and Commercial Consultant, PV projects Senior Advisor, Evaluator of PV and Wind Projects, Strategy and project Development
Main Activities & Objectives:	<p><b>I) Senior Technical Advisor for the operation and maintenance of the 1.65 MW wind pilot plant of National Energy Research Centre “NERC/RSS”</b></p> <p><b>II) Senior Technical Advisor for Wind side assessment, Wind potential (wind speed and wind direction) analysis, Design, Energy analysis and pre-feasibility analysis of 100 MW wind park south of Jordan.</b></p> <p><b>III) Senior technical assistant for the following on-going projects:</b></p> <ul style="list-style-type: none"> <li>○ PV On and Off Grid pumping systems for remote wells “Design and feasibility study” total capacity 50KVA.</li> <li>○ Monitoring of a solar radiation measurement station with integrated weather measurements at Maan Development Area</li> <li>○ Fostering Solar technology in the Mediterranean Area “Design, supervision, start-up of skylights BIPV project”</li> <li>○ PV Engineering Services (Inspection, design, supervision, advisory and commissioning) for: Al-Mashrek School, 200 kWp, 66 kWp PV rooftop grid-connected systems ‘ACC, SEPCO, IDECO”, 600 kWp PV rooftops and parking lot grid-connected systems “Princess Sumaya University for Technology (PSUT)”, 800 kWp wheeling PV system “Jordanian Egyptian Fajr for Natural Gas Transmission and Supply”, 750 kWp wheeling PV system “King Hussein Foundation”, 2200 kWp installed on rooftop for 2200 houses in Ma'an” Ma'an Development Company”</li> </ul> <p><b>IV) Senior advisor for the following evaluation services of PV Systems:</b> Jordan University 40 MWp PV project (D.BOT), Ma'an Development Area PV project 1 MWp, Jordan Silos &amp; Supply General Company (JSSGC) 3 PV projects total capacity 3,15 MWp.</p> <p><b>V) Senior advisor for the following PV testing &amp; commissioning services:</b> Jerash Private University 500 kWp, Ma'an Development company 1000 kWp, Philadelphia University 770 kWp and others PV projects with capacity up to 100 kWp, 50KVA PV pumping system.</p> <p><b>VI) Senior advisor for the following Major EU PV projects:</b></p> <ul style="list-style-type: none"> <li>✓ EU funded project “Machrek Energy Development – PV Solar (MEDSOLAR)”, EU funded project “Fostering Solar technology in the Mediterranean Area</li> <li>✓ (FOSTERinMED)”</li> </ul> <p><b>VII) Technical advisor for Conducting a feasibility study for wind and PV projects “Roof tops, wheeling, Pumping”</b></p>

	<b>VIII) Technical Supporting of the Biomass division</b>
Duration: mm/yy to mm/yy	07/2014 – 03/2016
Location:	Jordan
Client:	Consortium COWI S.A Belgium and Exergia Energy & Environment
Position/expert months provided:	KEY EXPERT of Europe Aid /132633/C/SER/multi Program {Capacity building in Wind Energy and Concentrating Solar Power in Jordan}/ {WECSP Project}
Main Activities & Objectives:	<p><b>Europe Aid: Capacity building in Wind Energy and Concentrating Solar Power in Jordan (WECSP Project)</b></p> <p>The aim of this part of the WECSP project is to accomplish / complement the Technical Assistant work done in the first part of the WECSP project (2011 -2013) and implement the current contracted Concentrated Solar Power (CSP) facility. The overall objective is to support the rational and sustainable use of alternative energy resources in Jordan and more specifically to support the National Energy Research Centre (NERC) to steer and facilitate the implementation of the Jordanian Government Renewable Energy Strategy 2007-2020.</p>
Duration: mm/yy to mm/yy	01-2016 - On going
Location:	Jordan
Client:	Short term Consultant for 40 working days with Jordan Workforce Development Project /DAI/USAID as technical adviser for PVI Vocational Curriculum in Arabic and English
Position/expert months provided:	Team Lead, Training Providers Institutional Development
Main Activities & Objectives:	Technical Consultant / Technical Adviser and Author of education material for PVI Vocational Curriculum in Arabic and English; Conducting 5 days training of Trainers of the VT Center in Maan.
Duration: mm/yy to mm/yy	03/2014 – 08/2014
Location:	Greece
Client:	“Green Venture S.A and Bio Energy S.A”
Position/expert months provided:	Technical Assistance Free Lance Cooperation
Main Activities & Objectives:	Technical consultancy on biomass plants and solar thermal power stations “CSP”/Market Research, Techno economic Analysis, Feasibility study and preparing application to the Ministry of Energy.
Duration: mm/yy to mm/yy	01/2011 – 01/2014
Location:	Jordan
Client:	Fraunhofer-Gesellschaft for her institute Fraunhofer ISE/ Germany, in consortium with CRES / Greece
Position/expert months provided:	<b>Team leader</b> of Europe Aid /129543/C/SER/Jordan Program {Capacity building in Wind Energy and Concentrating Solar Power in Jordan}/ {WECSP Project}
Main Activities & Objectives:	<p><b>EuropeAid: Capacity building in Wind Energy and Concentrating Solar Power in Jordan (WECSP Project)</b></p> <p>The WECSP project is aiming at establishing an entrepreneurship station of two RE systems, wind energy and concentrated solar power (CSP) pilot plants and interconnected them with the electricity grid of medium voltage. Consequently, these pilot plants will play a vital role in the promotion and exploitation of the wind and solar energy technologies in Jordan through capacity building of technical human resources for testing, data analysis, evaluation, and maintenance. Therefore, the qualified and trained resources will become capable of selecting the proven and optimum technology of renewable energies suitable for Jordan.</p>

	<p>Moreover, training courses for engineers, analysts, and technicians were organized through WECSPP project, and this will develop techniques for the market needs in Jordan, mainly in wind and solar energy fields. Additionally, workshops and training were conducted for academics (students, researchers, and scientists, etc.) in the Jordanian universities and institutes. Reviewed the Jordanian Energy Strategy and Policy and submitted recommendation on RES regulation in cooperation with NERC.</p> <p>More importantly, the WECSPP project will be a role model for encouraging the investment in the renewable energy and boost the interest of private sector in renewable energy technologies.</p> <p>Technical Advisor in Conducting the Grid Connection Impact Study for both Wind and CSP projects. Technical Advisor in conducting the Geotechnical study for both wind and CSP project. Also, technical advisor in conducting the Environmental Impact Assessment study for the location of both projects.</p>
--	---

Duration: mm/yy to mm/yy	09/2010 – 06/2014
Location:	Greece
Client:	Seven Energy Ltd
Position/expert months provided:	Shareholder and Technical Manager
Main Activities & Objectives:	Technical Manager, responsible for the Engineering, Design and Commissioning of PV projects of total capacity up to 8 MWp.

Duration: mm/yy to mm/yy	11/1996 – 07/1997
Location:	Greece
Client:	HELIODYNAMIS LTD
Position/expert months provided:	Engineer – employee
Main Activities & Objectives:	<p><b>Wind - R.O. desalination Plant in Therasia Island, Greece</b></p> <p>During the cooperation with the company Heliodynami Ltd., I was an engineer “Member of the technical team” responsible for the installation and operation of the desalination plant. The Therasia Wind-R.O. plant was commissioned in summer 1997. The design and installation of the plant was performed in the framework of the APAS Program funded by the European Commission DG- XII. The main objective of the project, entitled “Wind Powered Desalination for Small Coastal and Island Communities in Mediterranean Regions” (contract no RENA-CT94-0055), was the development of a robust system which would be able to operate at remote sites away from electricity grid.</p> <p>The prime contractor of this project was Vergnet SA (France) working together with Commissariat de l’Energie Atomique (France), Centro Marino International (Italy), Loughborough University (UK), Heliodynami Ltd. (Greece) and Societe Lorientaise de Construction Electromecanique (France).</p>

Duration: mm/yy to mm/yy	04/1990- 08/1991
Location:	Greece
Client:	HELIODYNAMIS LTD
Position/expert months provided:	Designer and installation Engineer – freelancer VALOREN Program funded by the European Commission DG- XII.
Main Activities & Objectives:	<p>Hybrid Solar system – Hydroelectric power and diesel generation plant in the month of Athos, North of Greece</p> <p>During the cooperation with the company Heliodynami Ltd., I was an engineer responsible for the design, installation and commissioning of the hybrid project. The Athos hybrid project was commissioned in summer 1991. The design and installation of the plant was performed in the framework of the VALOREN Program funded by the European Commission DG- XII. The project is entitled</p>

	<p>“Hybrid home remote energy system for Small Monastery in Mediterranean Regions”.</p> <p>The prime contractor of this project was Heliodynami Ltd-Greece and the Monastery of Simonos petras in the mount of Athos in the north part of Greece.</p>
--	---

Duration: mm/yy to mm/yy	06/1994 – 10/ 1995
Location:	Greece
Client:	HELIODYNAMI LTD
Position/expert months provided:	Employee - Engineer, Member of the technical team European program Altener
Main Activities & Objectives:	<p>Evaluation of the RES potential on the Lesvos island placing, collection, elaboration and evaluation of measurements of wind and solar dynamic.</p> <p>During my cooperation with the company Heliodynami Ltd., I was an engineer “member of the technical team” responsible for the implementation of project.</p> <p>The project is sponsored by the community program Altener, after the positioning of 6 measurement systems of wind dynamics for the whole area on behalf of the company in cooperation with TEDK Lesvos island (1994 - 1995)</p>

Duration: mm/yy to mm/yy	04/ 1995 – 11/ 1996
Location:	Greece
Client:	HELIODYNAMI LTD
Position/expert months provided:	Employee - Engineer, Member of the technical team European program Altener
Main Activities & Objectives:	<p><b>Research project in the Island of Mount of Athos, North of Greece</b></p> <p>During my cooperation with the company Heliodynami Ltd., I was an engineer responsible for the implementation of the project. The aim of the project is to evaluate the Renewable Energy Sources (RES) potential on the Mount and presentation capabilities installation projects and renewable energy facilities. Also, main objective of the project is the creation of the Renewable Energy potential (Solar radiation, Wind speed and direction, water sources, energy demand, Biomass, etc.) of the area in order to understand the meaning of RES and EE projects and to have the capability of implantation and installation RES and EE projects. Sponsored by the Altener program on behalf of the HELIODYNAMI Ltd company in cooperation with the FASMA Ltd Company.</p>

Duration: mm/yy to mm/yy	10/1987 – 12/2010
Location:	Greece, Saudi Arabia, Egypt,
Client:	Eng. Emil Alasis
Position/expert months provided:	FreeLancer, Renewable Energy Expert and Consultante
Main Activities & Objectives:	<ul style="list-style-type: none"> <li>– <b>Design and study of central heating units in the building sector (Jordan 1986-1987).</b></li> <li>– <b><u>Saudi Arabia</u>, Principle Technical Geobase (Saudi Arabia 1988-1988)</b></li> <li>– Design of autonomous and grid-connected small and large size photovoltaic, wind systems, hydroelectric and Hybrid Systems and stations (1986-2010)</li> <li>– Study of a hybrid power system of the monastery of Sani Georgy, Mont of Athos-Greece, consist of: 40 KWp PV station, 225 KVA Hydroelectric power station and 100 KVA Engine-Generator (2010)</li> <li>– <b>Design, technical study, environmental study, grid-connection study, issuing planning permission study for a tens PV park of 20 KWp till 2 MWp power grid-connected in Greece and Cyprus.</b> <p>Chios island, 2x 100 KWp (2009), Crete island on behalf of the SOLIS energy company, 80 KWp (2009), Attica, 2 MWp, 2010, Viotia - Greece on behalf of the NUTRIA Company, 600 KWp (2010), Peloponnese - Greece on behalf of the Generalis Company, 2 MWp (2010), Peloponnese - Greece on behalf of the ENERSYST energy company, 100</p> </li> </ul>



	<p>KWp (2009 - 2010), Peloponnese - Greece on behalf of the GOULANDRIS energy company, 100 KWp (2010)</p> <ul style="list-style-type: none"> <li>– Supervisor (Technical &amp; Financial) of a 6 PV grid-connected project of 80 KWp each on the island of Crete (2010) on behalf of the LAVRIS ENERGY S.A. - Greece</li> <li>– <b>Design</b>, technical study, grid-connection drawing for a <b>PV</b> station of 84KWp, 378 KWp, 100 KWp, 199,92 KWp, 225 KWp, 198 KWp and 540 KWp grid-connected on behalf of the VALIA LTD (2010)</li> <li>– <b>Design</b>, technical study, electrical drawing of a home roof <b>PV</b> grid-connected, total nominal power of more than 400 KWp (2010)</li> <li>– <b>Design</b> and study, development (file submission) and licensing of a wind park of 19,8 MW power at Megalovouni Dramas, project was issued license permit of production and installation in 2007, the project was completed in 2008. Also, Wind Parks of: 8 MW power at Sinora Dimou Dramas, 12 MW power at Arnithas, municipality of Rhodes, 12 MW power at Korfovouni Kilis and 13,6 MW at Xionovouni in Macedonia on behalf of the Private company “Pavlidis Marbles - Granites S.A.” from 2005 till 2007 and other parks, total power of 60MW.</li> <li>– <b>Researching, Study and Design for the projects “Supply and Installation of 40 photovoltaic units in Bedouin houses in Abu Rodeis and Supply and Installation of 38 photovoltaic units in Bedouin houses in Abu Zeneima” 2007, Sina Egypt.</b></li> <li>– <b>Design</b> and study, development (file submission) and licensing of a wind park of 12 MW power at Aetos in Macedonia on behalf of K. Xarakidis &amp; partners O.E. the wind was measured and the license permit from RAE is expected (2009).</li> <li>– <b>Fire protection study for building of the Technical Educational Institutions (T.E.I). In Halkida, Students Hostel as well as the big amphitheater (2002).</b></li> <li>– <b>Fire protection study for the food manufacturing unit (SNACK-RESTAURANT-COFFEE) of Mr Patelaros Dimitris in Athens (2002).</b></li> </ul>
--	--

Duration: mm/yy to mm/yy	07/1988 – 12/2010
Location:	Greece, Bahrain, Dubai
Client:	HELIODYNAMIS LTD
Position/expert months provided:	Leader of the engineering department, Technical manager, Employee Technical Manager, Consultant and Developer of RES projects
Main Activities & Objectives:	<p><b>Technical Manager, Consultant and Developer of RES projects</b></p> <ul style="list-style-type: none"> <li>– Design of autonomous and on grid-connected photovoltaic, Concentrating Solar Power Systems, wind systems, hydroelectric and Hybrid Systems and stations</li> <li>– Bahrain, Member of the technical team of study, preparation and presentation of proposal for “Establishment of manufacturing plant for photovoltaic wafers, cells, modules (capacity 60 MWp/year) and establishment of Manufacturing Plant for Silicon Purification (capacity 2500 tons/year)”, April 2007, part of it, would have been used in the building sector in the country.</li> <li>– Dubai, Design, study and presented PV street advertise table “design, supply and installation”</li> <li>– Energy surveillance and data analysis (wind velocity, solar radiation, exhaust analysis etc.)</li> <li>– Distribution of networks for the consumption of electric energy produced by RES</li> <li>– Selection-design and dimensioning of electro logical equipment systems for RES</li> <li>– Studies, preparations and file submission of RE projects (ERC) as well as several public services for the acquisition of the required licenses of production and installation of more than 100 PV on-grid stations.</li> </ul>

	<ul style="list-style-type: none"> <li>– Member of the control team and commissioning of a wind park of 5,1 MW at Sitia - Crete (1994)</li> <li>– Member of the control team and commissioning of a wind park of 5,1 MW, at Marmari - Evia (1994)</li> <li>– Design, technical study, and file submission for permission from ERC Greece, Ministry of Growth - tens of PV parks of 20 to 2000 KWp power connected for electricity production (2007 - 2010), which are in different phases of authorization or financial subsidies</li> <li>– Study, design and establishment of 2 PV stations of 26,72 KW / 220 Volt A.C power for mobile phone transponders COSMOTE, with automatic operation in cooperation with a generator (diesel) at Agio Oros (1999-2000).</li> <li>– Design, study, supervision and establishment of a PV park of 152 KWp and 200 KWp power connected at Kilis for electricity production (2008) / The project has been up and running since the summer of 2008</li> <li>– Design, technical study, and file submission for permission of a PV park of 1976 KWp power connected at Drama for electricity production (2007) / The project is at the final phase of authorization</li> <li>– Design, technical study, and file submission for permission of 6 PV parks with a total of 8040 KWp power connected at Karditsa for electricity production (2007).</li> <li>– Finding of land, design, technical and environmental studies, and file submission for permission of 22 PV parks of 80 KWp connected at Crete for electricity production (2008) / All the above said projects are authorized and installed by the end of 2010</li> <li>– Finding of land, design, technical and environmental studies, and file submission for permission of 6 PV parks of 60 KWp power connected at Limnos island for electricity production (2008)</li> <li>– Finding of land, design, technical and environmental studies, and file submission for permission of 4 PV parks of 70 KWp power connected at Lesvos for electricity production (2008) / the projects are installed by the end of 2010.</li> <li>– Design, technical and environmental studies, and file submission for permission of a PV park of 1820 KWp power connected at Preveza for electricity production (2008).</li> <li>– Design, technical study, and installation of home roof PVs of up to 10 KWp power connected for electricity production (2009 - 2010).</li> </ul>
--	---

Duration: mm/yy to mm/yy	04/1999 – 03/2010
Location:	Greece, Jordan, Romania
Client:	VECTOR HELLENIC WIND PARKS
Position/expert months provided:	Technical Associate – RES Expert - FreeLancer
Main Activities & Objectives:	<ul style="list-style-type: none"> <li>– Member of the evaluation, design, file preparation, dynamics and technical-financial study team of a wind park of 26 MW, at Constanta Romania (1999)</li> <li>– Position evaluation, member of the pole installation team for measurements of wind parameters and preparation for file submission to the production permission issue of a 2 wind parks of 18 MW and 12 MW power connected at Kilis (2006 and 2009)</li> <li>– Technical study, environmental study, grid connection study of a PV park of 2 MWp in the wind park at Heliokastro, which is at the phase of acquisition of production permission (2006, 2007)</li> <li>– Member of the assessment, wind dynamic, design, file preparation, technical study of the wind park Al kamsha of 36 MW, in the North of Jordan (2008) and a wind park Fujeig of 100 MW, in the South of Jordan. Also, collection of data, documents and maps from the local authorities</li> </ul>

	such as the Royal Jordanian Geographic Center, the Royal Scientific Society, NEPCO (Electrical Company) and the Ministry of Energy MEMR.
Duration: mm/yy to mm/yy	03/ 2005 – 09/2010
Location:	Greece
Client:	HELIODYNAMI SCIENTIFICALLY INSTRUMENTS S.A.
Position/expert months provided:	FreeLancer-Member and CEO and Technical Manager in E/M units of the measurement of air pollutants.
Main Activities & Objectives:	CEO & Technical Director and Technical Manager in E/M units of the measurement of air pollutants.
Duration: mm/yy to mm/yy	06/ 2002 – 05/ 2005
Location:	Greece
Client:	AIOLIKI KARPASTONIOU S.A.
Position/expert months provided:	FreeLancer- Technical and operational Manager
Main Activities & Objectives:	Operation Engineer of a wind park of 1.2 MW power.
Duration: mm/yy to mm/yy	10/2004 - 06/2005
Location:	Greece
Client:	Technological Institution of Piraeus
Position/expert months provided:	Laboratory Professor
Main Activities & Objectives:	Giving lectures regarding RES / Mild forms of Energy.
Duration: mm/yy to mm/yy	10/2004 - 06/2005
Location:	Greece
Client:	Technological Institution of Piraeus
Position/expert months provided:	Laboratory Professor
Main Activities & Objectives:	Giving lectures regarding RES / Mild forms of Energy.
Duration: mm/yy to mm/yy	10/1999 - 06/2010
Location:	Greece
Client:	Technological Institution of Halkida
Position/expert months provided:	Laboratory Professor
Main Activities & Objectives:	Giving lectures regarding energy management, renewable energy technologies, PV systems, Wind Parks, internal combustion engines, cooling technologies, etc. During the above teaching period, I have supervised several theses (more than 30).
Duration: mm/yy to mm/yy	07/2009 –09/2010
Location:	Greece
Client:	Technical Chamber of Greece (TEE IEKEM)
Position/expert months provided:	Rapporteur
Main Activities & Objectives:	Giving several lectures (8 x 20 Hours) regarding energy management, renewable energy technologies, saving energy in building for Engineers and potential energy inspectors.

## PERSONAL INFORMATION

## Nicoletta Metaxatos

15 Voukourestiou Str., 106 71 Athens, Greece

Office: +30 210 699 61 85

office@exergia.gr

Sex Female | Date of birth 13.05.1993 | Nationality Greek

## WORK EXPERIENCE

2015 to-date

## Energy and Environment Expert

EXERGIA S.A., 15 Voukourestiou Str 106 71 Athens, Greece – [www.exergia.gr](http://www.exergia.gr)

Business or sector Energy and Environment Consulting

## EDUCATION AND TRAINING

2019 – 2021

## M.Sc. in Finance

ALBA Graduate Business School

Risk Management Stream

2014 – 2015

## M.Sc. in Hydrology and Water Resources Management

Imperial London College

2011 – 2014

## B.Eng. in Civil Engineering

Cardiff University

## PERSONAL SKILLS

Mother tongue(s)

Greek

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user	C2 Proficient user

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user  
Common European Framework of Reference for Languages

## Organisational / managerial skills

Job-related skills

Ms. Metaxatos is a Civil Engineer with post-graduate studies in Hydrology and Water Resources Management. She is currently doing her master's degree in Finance, focusing on Risk Management. For the past five years she participates actively in various local and international energy and environment project, with main focus on projects related to EE and RE.

She has been involved in the execution of a number of energy and environmental projects in Greece or internationally. Indicatively, she has participated in various projects concerning the evaluation, mainly ex-post evaluations, of energy programmes internationally, and she is familiar with the methodology for evaluating projects. Through these projects, she has gained experience in the evaluation guidelines of the international financing institutions and the OECD criteria of relevance, effectiveness, efficiency, sustainability, and impact.

Furthermore, related to the field of energy, she participated in the GIZ framework assignment as backstopping expert, “Final Evaluation of the Renewable Energy and Energy Efficiency Programme (REEEP)”, where she provided support to the Team Leader for the review of all documents related to the REEEP in order to construct the Evaluation Matrix and evaluate the Programme.

She has also contributed to the preparation of environmental and social impact assessments for route modifications of the TAP high-pressure natural gas pipeline in Greece as well as to drafting of the relevant forest reinstatement studies. She has worked on drafting the ESIA for the Kafue Gorge small hydro power plant in Zambia, by collecting desktop information and drafting the environmental and social baseline. She also works on the preparation of tenders for European Commission or other IFI projects (EBRD, EIB, KfW, WB, etc.) in the fields of energy and the environment.

Computer skills	<ul style="list-style-type: none"> <li>Excellent knowledge of MS Windows XP, MS Office XP - Word, Excel, Power Point, Access</li> <li>Programming languages: C++, MATLAB</li> <li>Excellent knowledge of AutoCAD, GIS, NEAC.</li> </ul>
Driving licence	Holder of a Greek driving license. Category B vehicle.

#### ADDITIONAL INFORMATION

Memberships	-
-------------	---

#### ANNEXES

### I. List of projects

**EU, 01/07/2020- 30/06/2021, Support Study on Evaluation of Article 7A of the Fuel Quality Directive and assessment of approaches to reduce Greenhouse Gas emissions from transport fuels, DG CLIMA.** The objective of the project is to provide support to the Commission in relation to the following main areas of investigation, in accordance with the Commission's Better Regulation guidelines. Backstopping Expert. Assistance in the evaluation of the implementation by Member States of the current Fuel Quality Directive specifically with respect to the implementation of the greenhouse gas (GHG) intensity reduction of emissions over the lifecycle of transport fuels; evaluation of the Directive on its Effectiveness, Efficiency and EU Value added, including impact assessment step of problem definition, baseline development and policy option analysis; coordination of calculations for the GHG intensity reduction stemming from the use of alternative transport fuels (incl. CNG, LNG, bio-methane, etc.); participation in stakeholders engagement activities and stakeholders workshops.

**Nigeria, 07/2017- 09/2017. EU Delegation in Nigeria. Evaluation of the Nigerian Energy Support Programme (NESP1). Supporting Expert.** Review of all documents related to the project, together with the Key Expert that went on the field mission, they evaluated the NESP, which aimed improve energy access in Nigeria with a focus on the use of renewable energy (RE) and energy efficiency (EE) by SMEs and households, as well as improve investment climate in RE, energy efficiency EE and Rural Electrification (RrE). Among others, she was also responsible for the organization of the meetings for the expert, communication with the EU Delegation in Nigeria, GIZ and the relevant ministries and involved stakeholders. Participated in the development of the Inception Report of the project and prepared the final report of the evaluation. Time schedule follow-up and interim reporting.

**Bangladesh, 12/2018- 07/2019. GIZ. Final Evaluation of the Renewable Energy and Energy Efficiency Programme (REEEP). Supporting Expert.** The REEEP was based on the core problem, that the conceptual basis for the dissemination of Renewable Energy (RE) and Energy Efficiency (EE) measures are not adequate. The Government of Bangladesh (GOB) sets targets for RE and EE though, the knowledge of technological applications and its business case were inadequate, so other market enabling conditions including relevant policies were necessary.

**EU Delegation China, 01/2017- 07/2017. Final Evaluation of the “Europe-China Clean Energy Centre” (EC2-Project), Supporting Expert.** The global objective of the assignment was to review the outcome of the “Europe- China Clean Energy Centre”, EC2, and whether the project achieved the initially agreed objectives and results through the planned activities. Furthermore, the project included evaluation of the process of the project’s design and implementation, as well as evaluation of the relevance to the clean energy sector in China. The assignment also aimed at assessing the efficiency and effectiveness with which resources have been used to generate results and achieve project objectives with special emphasis on impact and sustainability.

**Pakistan, 05/2018- 01/2020, World Bank Pakistan study for water efficiency and wastewater management for industrial zones. Environment Expert.** The aim of the project is to assist IFC in comparing options and developing business plan in order to address water shortage and wastewater treatment requirements in three industrial zones in Pakistan, namely Korangi Industrial Estate, S.I.T.E. Industrial Area and Bin Qasim Industrial Zone. Review of the published sources on the management of the Industrial Zones, Gather information on water sources, water use and balance by industrial sectors in each Industrial Zones, Review of the legal and regulatory framework pertaining to water supply, water use and waste management in Industrial Zones, Carrying out surveys and develop of a strategy and detailed approach for surveying the water use and wastewater management in the Industrial Zones.

**DG Reform, 05/2019-05/2020. Roadmap for the systematization of the Environmental Legislation in Greece. Environmental Expert.** The global objective of the project was the creation of a roadmap, providing distinct actions for the systematisation of the most important local and regional environmental legislation, covering a series of needs of the country's Public Administrations, the public and the interested bodies. Analysis of the existing procedure followed by the Greek authorities when new environmental legislation is issued. Along with the Legal Experts, she participated in the interviews conducted with the public authorities, stakeholders, so as to better define the needs for the collection and thematic organisation of local and regional environmental legislation,

**Greece, 03/2018- 10/2019. EIA for the expansion of NEXANS plant in Ag. Marina. Environmental Expert.** The project comprises the preparation of an EIA in compliance with Greek legislation for the expansion of Nexans cable manufacturing plant in Ag. Marina, continental Greece. The EIA identified likely significant impacts associated with the expansion of the existing facilities and proposed appropriate mitigation measures. Emphasis was placed to water and wastewater management as well as waste management, taking into account that the plant is located in a Natura 2000 area. The EIA incorporated the results of Phase II assessment of the existing facilities and the expansion area.

**Zambia, Lusaka, 09/2018 - 06/2019. World Bank "Design of an Off-grid Information Portal for Zambia". Backstopping Expert.** The aim of the portal is to provide public information regarding the deployment of off-grids in Zambia. The Information Portal is designed in order to help improve access to data on the off-grid market opportunity (GIS analysis and market assessments), including information on the policy, legal and regulatory requirements and processes. Information on financing and support options, technical standards and specifications for mini-grid development, were also gathered and presented. She participated in the review of all the legislation in order to create the necessary procedure required to be followed by prospective developers.

**Greece, 2014-2017, Transadriatic Pipeline (TAP) – ESIA Amendment Service.** Following the approval of the ESIA for the TAP pipeline in Greece, EXERGIA has continued to work in the project assisting ENT and TAP in assessing from the environmental point of view a number of reroutings and changes to the location of project installations. The work included design and execution of field surveys, stakeholder engagement activities, report writing and support to meetings with the Ministry. Contribution to the preparation of environmental and social impact assessments for route modifications of the TAP high-pressure natural gas pipeline in Greece as well as to drafting of the relevant forest reinstatement studies.

**Tanzania, 2016, Development of an Online Information hub for mini-grid developers in Tanzania. Backstopping Expert.** Development of an Information Online hub to assist mini grid developers by providing a one stop information point containing the necessary information for licensing, permitting, financing, etc. of such projects. Review of the local legislation for renewable energy projects, preparation of the Inception Report.

**Greece, 2016, DEPA C/B Halkis Gas Distribution 2016.** The project included re-assessment of the natural gas demand and estimation of future trends in the relevant market, Estimation of the financial deficit for granting. Review of gas market legislative framework in Greece, Gas demand and revenues estimation, Preparation of cash flow estimations for the next 25 years.