



SOURCE ENERGY

Intelligent Power & Thermal Solutions
الحلول الذكية للطاقة والتطبيقات الحرارية





Company Profile

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National Tri-generation Company

National Tri-generation Company (NTCC) is a fully-fledged energy and cooling solutions company based in Riyadh, Kingdom of Saudi Arabia. NTCC is a joint stock company with a paid up capital of SAR 150,000,000.

NTCC is the first company to be authorized by the Electricity and Cogeneration Regulatory Authority (ECRA) in Saudi Arabia to provide field studies, perform the installation and operation of Tri-generation plants throughout the Kingdom.

Source Energy (SE) is one of the leading suppliers of customized utility solutions in the energy sector based in Riyadh, Kingdom of Saudi Arabia, with a paid up capital of SAR 103,500,000. SE finances, develops, builds, operates and maintains advanced technology plants that serve the long-term heating, cooling, and power requirements for commercial, industrial, and governmental clients.

NTCC has alliances with international companies specialized in providing total energy solutions which give the company the technological aptitudes and capabilities to develop and invest in cooling & power plant projects. supported by our three subsidiary companies:





Source Energy-BOOT

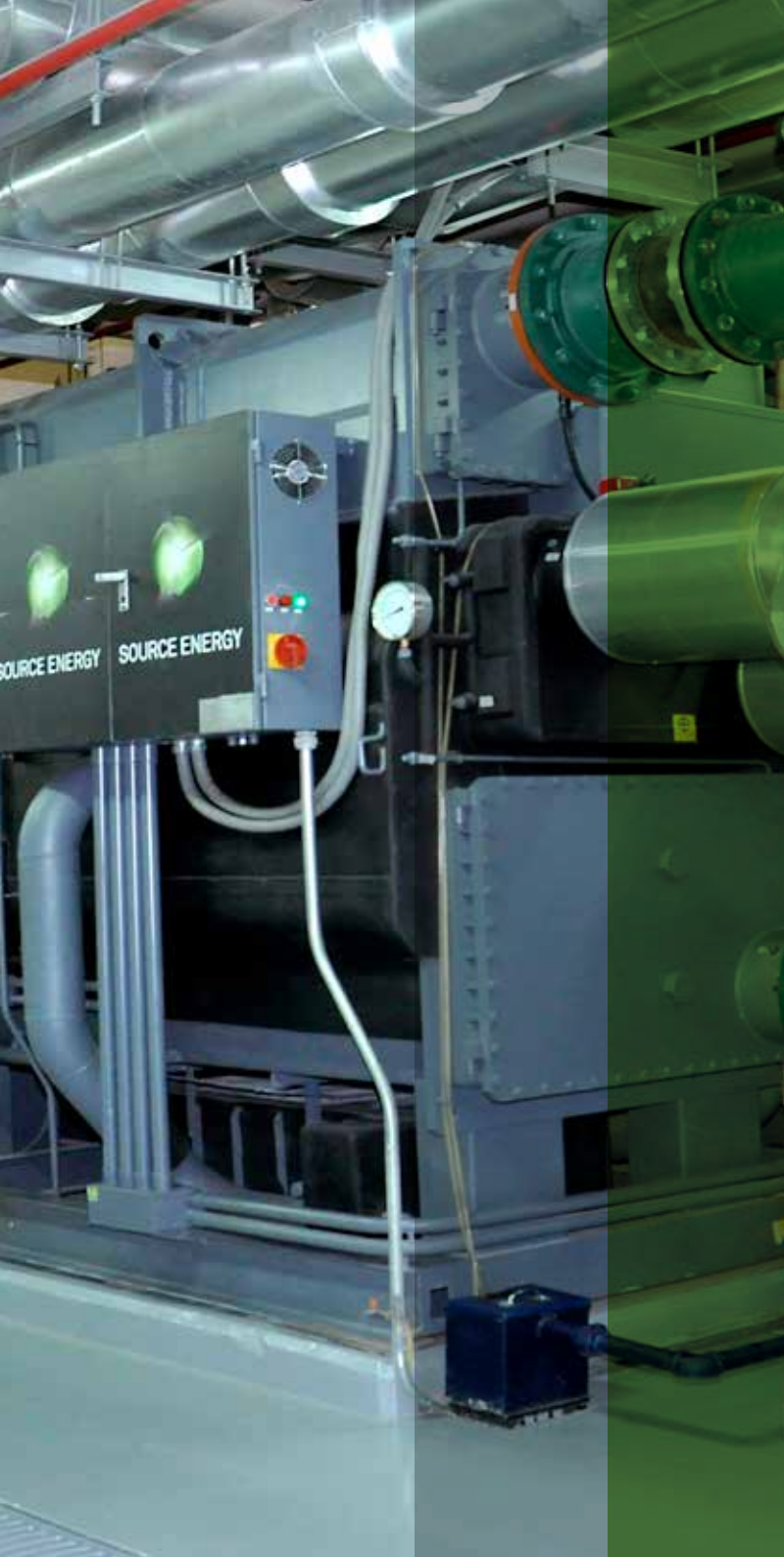
Source Energy Since 2007 operates in partnership with its clients to finance, develop, build, operate, and maintain advanced power technology solutions that meet the long-term heating, cooling, and power requirements of commercial, industrial, and government clients under the BOOT concept.

Supported by significant financial resources and an extensive network of influential relationships, Source Energy takes full responsibility for ensuring efficient, sustainable, and reliable district energy and cooling services for its clients, which are customized to their requirements from a single outsourced provider.

The management team of Source Energy brings collective and broad expertise in the fields of engineering, environmental issues, and energy. Our professionals offer a proven track record of advisory capabilities in business strategy and long-term energy development, strongly backed by our capabilities in planning, designing, constructing, operating, and managing a wide variety of electric generators, tri-generation, and district energy facilities.

Source Energy maintains a network of resilient alliances with financial institutions and international partners that specialize in total energy solutions, ensuring consistent access to the capability and liquidity for undertaking power development projects of any size.





At Source Energy, our core business is to provide innovative cooling and energy solutions that help organizations reduce operational costs, maintain asset lifespan, and promote renewable energy and energy efficiency. We offer a range of key solutions that may interest you these include, but are not limited to:

- Innovative cooling and energy solutions
- District energy O&M consultations
- Operations and maintenance services for district cooling and HVAC systems
- Energy optimization for cooling systems
- Design review and enhancement of original setups
- Cooling plant automation

We specialize in delivering cutting-edge technologies that are tailored to our clients' unique needs and requirements. Our team of experts offers sound advice and support throughout the project lifecycle. Our focus is on providing cost-effective and sustainable solutions that drive positive results.



VISION

Our vision is to lead the industry in providing efficient cooling, heating, power, and water solutions in KSA. We achieve this by offering a unique, comprehensive “turnkey” solution to our clients, delivered in a timely manner with state-of-the-art bundled technology that exceeds their expectations.

Our commitment to innovation and entrepreneurship ensures that we remain at the forefront of the industry.

We strive to preserve the ingenuity and creativity of the private sector while delivering cutting-edge solutions that drive positive results for our clients



MISSION

Our mission is to provide reliable and efficient power, cooling, and water outsourcing solutions to our clients at the lowest possible cost, while maintaining the highest level of performance. We are committed to delivering solutions that meet and exceed our clients' expectations, while also promoting sustainability and environmental responsibility that aligns with the country's vision.

We are dedicated to playing our part in building a sustainable future for Saudi Arabia by delivering innovative solutions that are both cost-effective and environmentally friendly.



What We Value

Source Energy

At Source Energy, our common values guide our actions and describe how we behave in today's world.

These values are:

Leadership: We have the courage to shape a better future in line with KSA 2030 Vision, which aims to lead the energy market and promote sustainable development.

Collaboration Ventures & Partners: We believe in the power of collaboration and partnerships to leverage collective masterminds and achieve shared goals and success

Integrity: We act with honesty, transparency, and accountability in all our dealings.

Accountability: We take full responsibility for our actions and strive to deliver on our commitments.

Passion: We are fully committed and dedicated to our work and strive to achieve excellence in all areas of our business.



Diversity: We promote diversity and inclusivity in our solutions and operations to better serve our clients and stakeholders.

Quality: We excel at what we do and strive to deliver high-quality solutions that meet and exceed our clients' expectations



Our Services

Source Energy customized O&M solutions for end users and business owners (which is in return a complimentary services to our BOT, BOOT, BOO and DBO business) ranging from full performance-based total O&M to reduced scope services such as maintenance, engineering, process control systems (SIEMENS Partners) and the mobilization of new project operations, including the provision of technical specialists, tools, and processes for the facility.

There is also the contracts-based model, with contracts associated with various levels of service such as PPM, troubleshooting and specialized maintenance contracts. The most comprehensive service levels involve the provision of integrated O&M services, which means carrying out a customized approach for the prospective clients. O&M contracts cover all aspects and activities necessary to run cooling plants in a safe and economical manner.





The cooling services business environment has been evolving over recent years, and business owners have had to look at alternative ways of managing their business efficiently from an economic point of view.

Operations and maintenance (O&M) forms a core business area for cooling services and has started getting a lot of attention due to its strategic impact on energy costs.

In the long-term the end users and business owners are now focusing on O&M strategies to stay cost-competitive, improve their operational excellence and extending the life expectancy of assets.



01

SOURCE ENERGY

Chilled Water Plants O&M Services

Choosing the right O&M strategy is a major key of success. Source Energy is striving for economic excellence by implementing a very precise O&M methodologies. The most important factors for an efficient and successful O&M strategy are the effectiveness of manpower and assets life-span optimization.

SE | Source Energy





OPERATIONS

- Optimization of manpower and available resources
- Building a new reliable Standard Operating Procedures (SOP) and improving existing SOPs if required
- Continuous tracking of existing sequence of operation and if required alter it to achieve best Best Operating Point BOP if necessary
- Strive for optimization of Power - Kw/Ton , water consumption - m³/Ton either with an existing plant set up or through additional systems at a lower cost to customer with minimum payback period
- Benchmarking efficiency level of major equipments' of the plant on annual basis



MAINTENANCE

The Total Productive Maintenance scheme is targeted to be achieved by focusing on the following:

- Focused Improvement
- Autonomous Maintenance
- Planned Maintenance
- Training and technical education
- Early management
- Quality Maintenance
- Office total productive maintenance
- Safety, health and environment





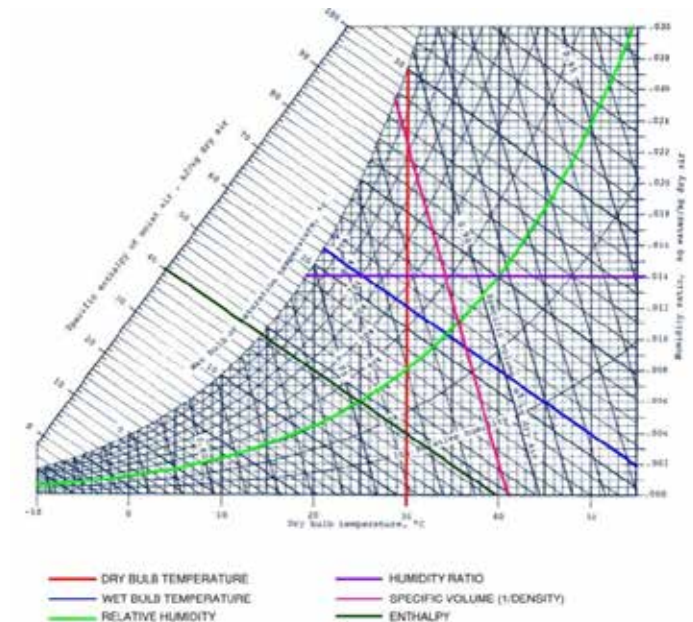
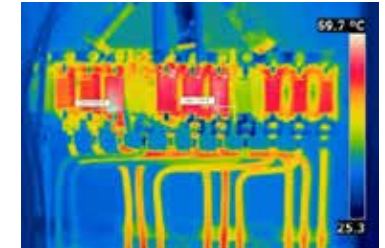
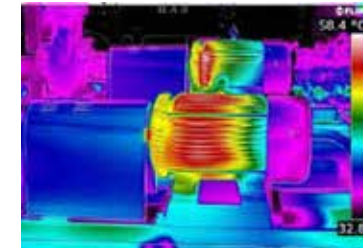
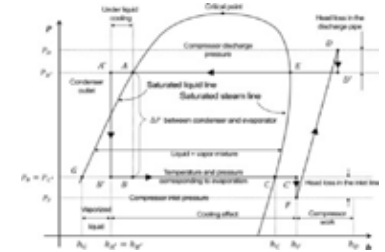
SOURCE ENERGY

O&M Consultancy Services

At Source Energy, we provide O&M consultancy services for cooling plants and HVAC systems. With over 15 years of solid, diversified technical experience in the design, operation, and maintenance of cooling plants and HVAC systems, we offer a range of consultancy services for asset optimization, O&M services, investigations, project management, and energy efficiency.

To reach to the optimum performance of the cooling systems we conduct all the below tasks and analysis techniques but not limited to:

- 1- Design review
- 2- Study of standard operating procedures SOP's
- 3- Study of control scheme
- 4- Hydronic analysis
- 5- Heat load and psychometric analysis
- 6- Manpower optimization
- 7- Performance analysis of major systems (chillers, cooling towers, pumps, TES's, air handlers... etc.)
- 8- Study of maintenance program.
- 9- Energy calculations
- 10- Vibration and thermographic analysis.





03

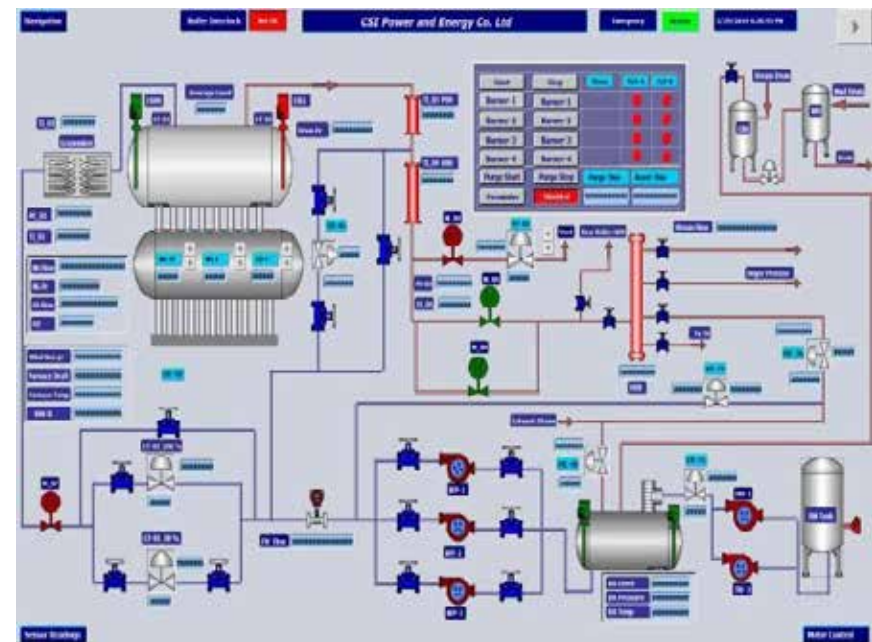
SOURCE ENERGY

Cooling Plants Automation and Energy Optimization

The main objective of our control system is to be adaptive in nature and to implement the best sequence of operations depending on the existing plant conditions. We work to obtain the operation optimization point between different major plant equipment, such as chillers, cooling towers, and pumps, which is key for energy savings. Achievable energy savings in cooling plants can range from 15 to 40 percent, depending on the existing condition of the plant.

We offer cutting-edge technology and expertise to deliver reliable and efficient cooling and energy solutions.

Source Energy is an authorized channel partner of Siemens Automation for the development of control schemes, PLC algorithm programming, and the building of required hardware and SCADA systems for cooling plants. Our goal is to achieve optimization in manpower and energy efficiency.





04

SOURCE ENERGY

HVAC Systems

SOURCE Energy provides intelligent power and thermal solutions for all types of air conditioning, ventilation, and air solutions. Our solutions include:

- Supply
- Installation work.
- Chilled Water Systems.
- Consultancy Services.
- Operation & Maintenance

Supply:

We supply all types of air solutions, including the necessary equipment, units, fans, and full support to help our clients choose the right solutions for their projects.

Installation work:

At Source Energy, we not only supply the materials but also provide installation services for all types of AC and refrigeration units, pipes, and ducts, using high-quality materials and expert technicians.

Chilled Water System:

We have a successful history in the field of chilled water systems, including district cooling as BOOT and O&M, with all types of chillers, including air-cooled, water-cooled, and absorption types, for supply and installation.

Consultancy services:

We provide consultancy services for HVAC starting from the concept stage, offering innovative solutions to meet our clients' needs.

Operation & Maintenance:

We believe in the importance of maintenance, and as such, we provide preventive and emergency maintenance services on a short and long-term basis.





05

SOURCE ENERGY

Energy Efficiency

Source Energy [SE] provides innovative energy efficiency and renewable solutions that lower utility costs, increase net operating income and profitability, improve facility performance and manage risk. Our projects typically reduce OPEX by reasonable percentage and financial payback periods.

Services

- Develop a baseline model of energy consumption according to International Energy Efficiency Protocols (Level I,II and III)
- Identify and minimize the energy wastage
- Make changes to equipment and systems to save energy
- Retrofit energy efficiency technologies
- Exploit the renewable energy resources like solar Energy and winds energy
- Reducing the running costs
- Energy Audit: DFS-Detailed Facility Study.
- Installation of Energy Saving/Conservation Measures [ECMs].
- Measurement and Verification [M&V].

Solutions

- LED lighting upgrades.
- Energy Management Systems
- HVAC optimization.
- Central plant upgrades.
- High efficiency pumps, motors and VFDs.
- Building envelope enhancements.





06

SOURCE ENERGY

Electric Vehicle (EV) Solutions

Source Energy (SE) considered EV Solutions as one of main potential solutions and offerings to Saudi Arabia market.

Source Energy In the past decade, it has been seen a surge in the use of new digital technologies. EV is highlighted one of the major CO2 reduction initiative Source Energy is a part of the technology growth in KSA market by investing and running agile mitigating the beloved kingdom transformation and become a preferred CPO in the market. Our partners expertise promise a best practice of world class service in EV, and EV Charging products & solution.

Source Energy has the collective knowledge in Energy & Power which's reflected environmental responsibilities allowing us to expand to new field of electric vehicle chargers with global companies, benefiting from their solutions and knowledge, to hunt EV opportunities in Saudi market.

Source Energy's strategy to be one of the main EV solutions provider and to lead the market for EV stations and chargers

Source Energy (SE) plans to establish strategic partnerships with international EV charger companies and electric cars.





07

SOURCE ENERGY

Smart City Infrastructure / IoT & AI

Source Energy (SE) considered IOT & AI Solutions as one of main potential solutions and offerings to Saudi Arabia market. Source Energy offers sustainable buildings or facility through automation solutions and services that transform businesses through effective ideas, analytic algorithms

- Smart infrastructure
- Smart Governance
- Smart Education
- Smart Energy
- Smart Mobility
- Smart HealthCare
- Smart Buildings
- Digitalization in others

Our solution contributes to ensuring the following:

- Reduced Energy Costs
- Reduced Building Operational Costs
- Reduced Facility Maintenance Costs
- Optimized Manpower
- Detailed history and records
- Monitored equipment performance efficiency





08

SOURCE ENERGY

Renewable Energy–Solar Energy

Source Energy (SE) considers renewable energy as one of the main potential solutions and offerings to the Saudi Arabia market to align with the country's vision for 2030.

Source Energy believes that investing in solar energy benefits both society and the environment, and we are always striving to improve and develop our solutions to meet our customers' needs in the best possible way.

Services and solutions:

- Installing solar power systems
- Designing
- Maintenance and technical support services





PROJECTS

Source Energy

01. Project Name & Type:
SNB-Regional Office (Saudi National Bank) BOOT

Project COD: **May 2007**

Project Location: **Riyadh, Saudi Arabia**

Project Type: **Cooling Solutions**

Capacity:

Cooling 2,233 TR & 4710 KW Hot Water

ASSETS VALUE (SR): **6,370,778**

Power taken from SECO for the Chillers - 600 kW



01



02

02. Project Name & Type:
SNB-IT Center (Saudi National Bank) BOOT

Project COD: **May 2005**

Project Location: **Jeddah, Saudi Arabia**

Project Type: **Cooling Solutions**

Capacity: **1,544 TR**

ASSETS VALUE (SR): **6,993,896**

Power taken from SECO for the Chillers - 800 kW



PROJECTS

03.

Project Name & Type:

Princess Al-Anood Towers (I&II) BOOT

Project COD: **November 2011**

Project Location: **Riyadh, Saudi Arabia**

Project Type: **Cooling Solutions**

Capacity: **3,315 TR**

ASSETS VALUE (SR): **15,505,990**

Power taken from SECO for the Chillers - 2100 Kw



العهد للاستثمار

03



04

04.

Project Name & Type:

KRT King Road Tower BOOT

Project COD: **December 2011**

Project Location: **Jeddah, Saudi Arabia**

Project Type:

Combined Heat and Power Solutions (CHP)

Capacity:

4MW, 6,600 TR (NTCC generators)

ASSETS VALUE (SR): **62,380,897**





PROJECTS

Source Energy

05. Project Name & Type: **SNB HQ (Saudi National Bank – Headquarters) BOOT**

Project Location: **Jeddah, Saudi Arabia**

Project COD: **September 2014**

Project Type: **Cooling Solutions**

Capacity: **2,388 TR**

ASSETS VALUE (SR): **19,439,445**



Power taken from SECO for the Chillers - 600 Kw



05



06

06. Project Name & Type: **Rafal Tower - BOOT**

Project Location: **Riyadh, Saudi Arabia**

Project Type:

Cooling Solutions and Hot water Supply

Project COD: **October 2013**

Capacity: **6,119 TR, Hot Water 3200 KW & 2.25 MW**

ASSETS VALUE (SR): **38,660,107**

Power generated for the chillers – 1200 kW



PROJECTS

07. Project Name:
Saudi France Bank

Project Type:
Design & Install Solar Systems

Capacity:
121.66 Kwp



07



08

08. Project Name:
Al Romansiah Restaurant

Project Location:
Al Yarmouk – Riyadh

Project Type:
Solar System (on Grid)

Capacity:
121.66 kWp





PROJECTS

Source Energy

09. Project Name:
Saudi National Bank

Project Type:
Energy Efficiency

Capacity:
Whole Facility



09



10



10. Project Name :
Al marai Company

Project Type:
Energy Efficiency

Capacity
Whole Facility



PROJECTS

11. Project Name:
Islamic Arts Biennale - Ministry of Culture

11

Project Location:
Jeddah, Saudi Arabia

Project Type:
D&B-MEP-EPC

Built - up area:
33,000 m²





ISO CERTIFICATIONS

Source Energy

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Bureau Veritas Certification

SOURCE ENERGY

BUILDING NO 3540, PRINCE SULTAN BIN ABDULAZIZ STREET, 7666 AL SULAIMANIYAH DISTRICT, RIYADH 12223, SAUDI ARABIA

Bureau Veritas Certification Holding SAS - UK Branch certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO 9001:2015

Scope of certification

BUILD, OPERATE, TRANSFER OF DISTRICT COOLING AND DEDICATED COOLING PLANTS
 BUILD OPERATE, TRANSFER OF TRI GENERATION COOLING PLANTS
 OPERATION AND MAINTENANCE SERVICES OF COOLING PLANTS
 DEVELOPMENT OF COOLING PLANT AUTOMATION SYSTEMS

Original Cycle Start Date:	08-08-2022
Expiry date of previous cycle:	NA
Certification / Recertification Audit date:	22-04-2022
Certification / Recertification cycle start date:	08-08-2022

Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: 07-08-2025

Certificate No.: SA002914 Version: 1 Issue date: 00-06-2022



Certification Body Address: 381 Fleet, 44 Princes Street, London, E1 8HS, United Kingdom
 Local Office: Bureau Veritas Company, Al Rajh Tower, 4th Floor, King Abdulaziz Road, P.O. Box 20189, Al-Madina 21932, Kingdom of Saudi Arabia

Further information regarding the scope and validity of this certificate, and the applicability of the management system requirements, please refer to: 10 0021071



Bureau Veritas Certification

SOURCE ENERGY

BUILDING NO 3540, PRINCE SULTAN BIN ABDULAZIZ STREET, 7666 AL SULAIMANIYAH DISTRICT, RIYADH 12223, SAUDI ARABIA

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ISO 14001:2015

Scope of certification

BUILD, OPERATE, TRANSFER OF DISTRICT COOLING AND DEDICATED COOLING PLANTS
 BUILD OPERATE, TRANSFER OF TRI GENERATION COOLING PLANTS
 OPERATION AND MAINTENANCE SERVICES OF COOLING PLANTS
 DEVELOPMENT OF COOLING PLANT AUTOMATION SYSTEMS

Original Cycle Start Date:	08-08-2022
Expiry date of previous cycle:	NA
Certification / Recertification Audit date:	22-04-2022
Certification / Recertification cycle start date:	08-08-2022

Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: 07-08-2025

Certificate No.: SA002916 Version: 1 Issue date: 00-06-2022



Certification Body Address: 381 Fleet, 44 Princes Street, London, E1 8HS, United Kingdom
 Local Office: Bureau Veritas Company, Al Rajh Tower, 4th Floor, King Abdulaziz Road, P.O. Box 20189, Al-Madina 21932, Kingdom of Saudi Arabia

Further information regarding the scope and validity of this certificate, and the applicability of the management system requirements, please refer to: 10 0021071



Bureau Veritas Certification

SOURCE ENERGY

BUILDING NO 3540, PRINCE SULTAN BIN ABDULAZIZ STREET, 7666 AL SULAIMANIYAH DISTRICT, RIYADH 12223, SAUDI ARABIA

Bureau Veritas Certification Holding SAS - UK Branch certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO 45001:2018

Scope of certification

BUILD, OPERATE, TRANSFER OF DISTRICT COOLING AND DEDICATED COOLING PLANTS
 BUILD OPERATE, TRANSFER OF TRI GENERATION COOLING PLANTS
 OPERATION AND MAINTENANCE SERVICES OF COOLING PLANTS
 DEVELOPMENT OF COOLING PLANT AUTOMATION SYSTEMS

Original Cycle Start Date:	08-08-2022
Expiry date of previous cycle:	NA
Certification / Recertification Audit date:	22-04-2022
Certification / Recertification cycle start date:	08-08-2022

Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: 07-08-2025

Certificate No.: SA002934 Version: 1 Issue date: 00-06-2022



Certification Body Address: 381 Fleet, 44 Princes Street, London, E1 8HS, United Kingdom
 Local Office: Bureau Veritas Company, Al Rajh Tower, 4th Floor, King Abdulaziz Road, P.O. Box 20189, Al-Madina 21932, Kingdom of Saudi Arabia

Further information regarding the scope and validity of this certificate, and the applicability of the management system requirements, please refer to: 10 0021071





CLASSIFICATION CERTIFICATE

Source Energy

رقم الشهادة: 2022060523022 / 07 / 20
تاريخ الإصدار

الدرجة الأولى

بلد balady

وزارة الشؤون البلدية والقروية والإسكان
Ministry of Municipalities, Urban Planning and Housing

شهادة تصنيف مقدمي خدمات المدن

تمنح وزارة الشؤون البلدية والقروية والإسكان شهادة تصنيف الدرجة الأولى

المنشأة: الشركة الوطنية لإمدادات الطاقة

في قطاع التشييد والبناء

1010251651	السجل التجاري
توليد الطاقة الكهربائية توزيع الطاقة الكهربائية وبيعها بالتجزئة توزيع الطاقة الكهربائية وبيعها بالجملة إنشاء وإقامة محطات الطاقة الكهربائية والمحولات تركيب شبكات الطاقة الشمسية وصيانتها وأصلحها تركيب أنظمة التبريد وتكييف الهواء وصيانتها وأصلحها تركيب وتعميد أنابيب تكييف الهواء وصيانتها وأصلحها	النشاط

- يسري مفعول هذه الشهادة حتى تاريخ 02/01/1445 هـ / الموافق 20/07/2023 م
- تصدر هذه الشهادة إلكترونياً وعلى الجهات المالكة للمشاريع التحقق من الشهادة المقدمة من خلال موقع الوزارة

مختبر الوزارة لتصنيف المقاولين
د. أحمد بن جميل قطان

تصنيف مقدمي خدمات المدن





SEEC CERTIFICATE

Source Energy

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المركز السعودي لكفاءة الطاقة
Saudi Energy Efficiency Center



تاريخ الإصدار : 7/4/2023
تاريخ الإنتهاء : 7/4/2024
رقم الطلب : PE20230100016

بناء على قرار لجنة الترخيص، أصدر المركز السعودي لكفاءة الطاقة شهادة

ترخيص شركات خدمات الطاقة - ترخيص مؤقت

الإسم التجاري : الشركة الوطنية لامدادات الطاقة
رقم السجل التجاري : 1010251651

نوع النشاط : تقديم خدمات التصميم الهندسي لمعايير كفاءة الطاقة و إدارة مشاريع
كفاءة الطاقة و مراجعة البيانات والتدقيق في المباني و تقديم خدمات
القياس والتحقق من الطاقة
العنوان: حي السليمانية - طريق الامير سلطان بن عبدالعزيز, الرياض

الختم



مدير عام المركز السعودي لكفاءة الطاقة





let's work together.

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Email: info@ntcc.com.sa



THANK YOU

