



RENEWABLE RESOURCES (PVT.) LTD

Company Profile



JANUARY 2023

CEO's Message

At this juncture, we are encountering the worst electricity crisis in the history of Pakistan, resulting in extended load shedding which virtually impedes our industrial growth and suspends social life. If we analyze the electricity mix of Pakistan; it is heavily tilted towards imported oil. Any oil price hike in the international market strikingly impacts our electricity generation which could result in the current circular debt becoming more critical. Renewable Resources Pvt. Ltd (RE2) was established in 2009, with an aspiration to promote and facilitate development of renewable energy technologies in Pakistan to secure sustainable energy.



Today I am proud to say that we have made an impact and the company is involved in the consulting of renewable and indigenous energy projects of more than 2050 MWs in Pakistan. In just the wind sector we have more than 70% of the market share together with our partner Tractebel Engie GmbH, Germany formerly called as Lahmeyer International. This is just the beginning and I wish that, in the next few years, renewable energy shall get its due share in the electricity mix of Pakistan. BUT wishes can't make things, happen it's the action. We have taken the first step by providing the quality services to our clients by becoming the One Stop Shop for them.

Our professional and dedicated team is not only providing consulting services to the investors and developers BUT are also involved with lenders for due diligence of projects. We are also finding new sites with the potential for Wind, Solar and other Renewable Energy resources for the development of these indigenous technologies.

To hone our capacity and follow the international best practices we partner with Lahmeyer International GmbH (LI) of Germany - one of the leading international players in the consulting business.

In the end I commit that we will continue striving to provide the timely quality services to our clients.

Dr. Irfan Afzal Mirza
Chief Executive Officer

Mission Statement

Our goal is to be the leading consulting firm in Renewable Energy sector not only in Pakistan but overseas as well, by giving our clients well-timed superior quality services and helping them in earning the due profits. We also commit to make meaningful contribution to help our country achieving sustainable energy future and to protect this planet for future generations and contributing in blue skies for them.



Who Are We?

What Is RE2?

REnewable REsources (RE2) provides consultancy services for Renewable Energy and Indigenous Energy projects. The company was incorporated in 2009 and has its head office in Islamabad and a branch office in Karachi.

RE2 is a ONE STOP SHOP for the development of renewable energy power projects. RE2 envisages positioning itself among the major energy advisory companies globally and strives towards creating a cleaner and sustainable future while ensuring its corporate aims substantially contribute towards the additional goal of poverty alleviation.

Can We Help You?

When you embark on a building project in this day and age — regardless of whether that project is big or small — you can find yourself burdened with an overwhelming sense of responsibility

- Can I stay within budget and still get the quality of workmanship I need?
- How will my decision today have an impact on tomorrow?
- Am I achieving the right balance between energy efficiency and financial viability?
- How can I do it in the best possible way and in-line with the proven success stories?

It doesn't seem to matter how much progress we make, the demands to produce more with less and to achieve the lowest possible carbon footprint are ever increasing. These pressures can make planning a nerve-racking task, let alone a full-scale project execution.

RE2 provides top notch energy engineering and management consultancy to enable rapid deployment of efficient, cost-effective, reliable, and environment-friendly energy projects. Our customized technical solutions and services are dedicated to investment firms, energy groups, industries, financial institutions and public sector organizations involved in the development and / or acquisition of renewable and indigenous power plants.

RE2 offers services for new “green” business innovations. For impeccable project development; RE2's range of expertise include *inter alia* resource assessment, power production analysis, selection of technology / power equipment, feasibility studies, environmental examinations, government approvals, project due diligence, project agreements, security documents, and supervision and monitoring the EPC and O&M activities.

RE2 is well acquainted with the policies, regulations, methodologies and standards of power project cycles, which enable it to make valuable contributions in obtaining Generation License, approval of Tariff, Energy Purchase Agreement (EPA) / Power Purchase Agreement (PPA), Water Use Agreement (WUA) and Implementation Agreement (IA).

How Can We Help You?

RE2 employs effective and time efficient practices in project development that are considerate of technical, financial and administrative aspects dictated by each stage of the project. Such practices are vital in power projects in order to identify and save unnecessary and huge overheads during execution.

From Zero to Hundred

Our services are designed for investors (private and public), lenders, other financial institutions, EPC contractors, public sector and donor agencies, as well as for energy and industrial groups. Our team is composed of leading experts for different fields in the energy sector.

RE2 is currently providing services in the following areas:

- ❖ Wind Power
- ❖ Solar Photovoltaic Power
- ❖ Hybrid Power
- ❖ Hydro Power
- ❖ Bio Energy – Biomass, Biogas, Bio Diesel
- ❖ Thermal Power
- ❖ Grids & Transmission Systems
- ❖ Health, Safety, Social and Environmental Services
- ❖ Carbon Emission Reduction

At a micro level, RE2 offers the following exclusive services for project design, development and implementation:

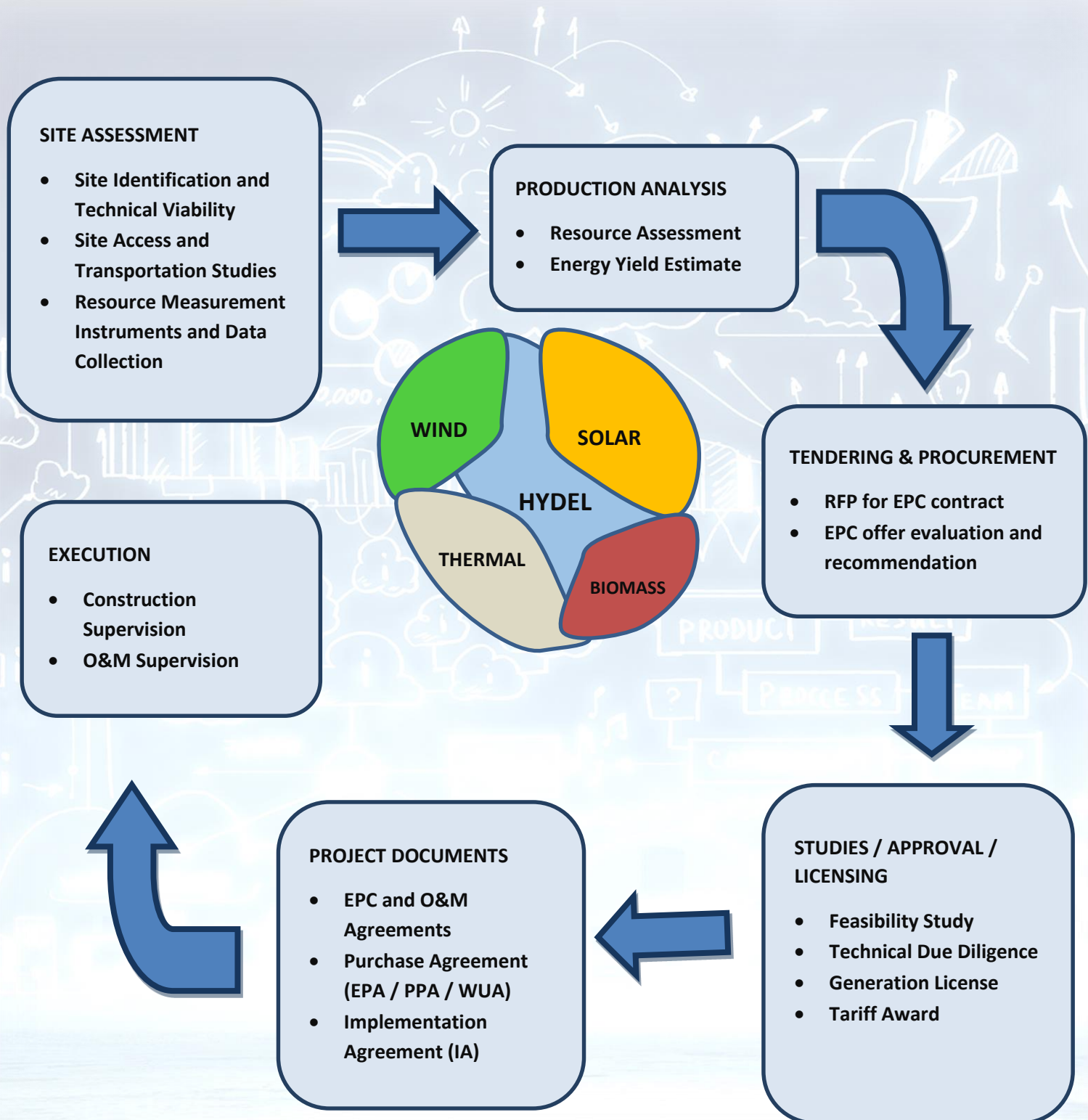
- Site Facilitation and Acquisition
- Site Investigations
- Handling of Energy Resource Measuring Equipment
- Resource Assessment (Wind, Solar, Hydrology)
- Energy Production Analysis using licensed, internationally acclaimed software
- Noise and Shadow Analysis
- Project Design review including civil, electrical, mechanical design
- Project resource and implementation planning
- Environmental and Social Impact Assessment
- EPA / PPA / WUA / IA Consultations and Negotiations
- Generation License and Tariff
- Support in approvals, permits and consents required in all steps of development
- EPC and O&M Contracts development, negotiations, finalization
- Full blown EPC Construction Supervision
- O&M Supervision
- EnS Compliance audits services

RE2 ensures quality while maintaining health and safety protocols and is certified by SGS for the ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007 standards



From Zero to Hundred

The Project Development Cycle



Client Portfolio



Sustainable Growth through Prudence

RE2 has completed various projects for local and international developers. A brief list of projects followed by completed milestones and project gallery is given below:

THREE GORGES FIRST WIND FARM PAKISTAN (PVT) LTD OWNED BY CHINA THREE GORGES CORPORATION

Development of **49.5 MW Wind Power Project** in Jhimpir, Sindh, Pakistan. The sponsor is one of the biggest power sector developers in China and also owns the world's biggest Three Gorges Dam in China. RE2 was the Owner's Engineer of the project since inception and provided the project development as well as construction supervision services. RE2 also facilitated in obtaining all the government permits and licenses. The project is in operation and feeding to the National Grid.

FOUNDATION WIND ENERGY LTD (2X50MW)

Development and Construction supervision of **2X50 MW Wind Power Project**, FWEL-I & FWEL-II in Gharo, Sindh – Pakistan, by RE2 in partnership with Tractebel Engie GmbH (TEG) Previously called as Laymeyer International. The project has achieved Commercial Operation Date (COD). RE2 along with its partner (Lahmeyer International) were Lenders Engineer as well as Owner's Engineer keeping a Chinese wall in between. This was the first time in wind history of Pakistan that the same company was the owner's engineer as well as the lender's engineer in the same project, rendering confidence by the various key stakeholders. The involvement was due diligence in the development phase followed by full-scale construction supervision.

YUNUS ENERGY LIMITED

Development and Construction supervision of **50 MW Wind Power Project** YEL in Jhimpir, Sindh – Pakistan; COD was achieved in 3rd quarter of 2016. RE2 along with its partner (Lahmeyer International) were Lenders Engineer as well as owner's engineer keeping a Chinese wall in between. The involvement was due diligence in the development phase followed by full-scale construction supervision.

UEP WIND POWER PVT. LTD OWNED BY UNITED ENERGY PAKISTAN LIMITED

Development and Construction supervision of **99 MW Wind Power Project** in Jhimpir, Sindh, Pakistan. RE2 has been involved in the development stage from inception and was working as owner's engineer for construction supervision. Its COD was achieved in 2nd quarter of 2017. This project is under **China Pakistan Economic Corridor (CPEC)**.

MASTER WIND ENERGY LTD (MWEL)

Development and Construction of **50 MW Wind Power Project** in Jhimpir, Sindh, Pakistan; the project is in the construction phase, COD was achieved in 4th quarter of 2016. RE2 is the Project consultant and owner's engineer. RE2 is involved with the Project from inception.

Wind Power

THREE GORGES SECOND WIND FARM PAKISTAN LTD AND THREE GORGES THIRD WIND FARM PAKISTAN PVT. LTD

Development and Construction of **2X50 MW China Three Gorges Second and Third Wind Farms (TGS/TGT)** in Jhimpir, Sindh, Pakistan. RE2 is the consultant since inception till financial closing. The Owner's Engineer role for construction phase is with cooperation of RE2 with Tractebel Engie GmbH(TEG) previously called as Lahmeyer International. The expected COD is in 3rd of financial closing is end of 2016.

GUL AHMED WIND POWER LTD (GAWPL)

Construction supervision of **50 MW Wind Power Project** in Jhimpir, Sindh, Pakistan, the first Wind Power Project by Gul Ahmed Energy Limited; the project's COD was achieved in the 4th quarter of 2016. RE2 is the Project consultant and owner's engineer along with Lahmeyer International.

METRO WIND POWER LTD (MWPL)

Construction supervision of **50 MW Wind Power Project** in Jhimpir, Sindh, Pakistan, the first Wind Power Project by Metro Wind Power Limited; the project's COD was achieved in the 4th quarter of 2016. RE2 is the Project consultant and owner's engineer along with Lahmeyer International.

HAWA ENERGY (PVT.) LTD

Development of **50 MW Wind Power Project** in Jhimpir, Sindh, Pakistan. The sponsors are from USA. COD was achieved in 1st quarter of 2018. RE2 is the consultant since inception till financial closing. The Owner's Engineer role for construction phase is with cooperation of RE2 with Tractebel Engie GmbH(TEG) previously called as Lahmeyer International.

ARTISTIC ENERGY PRIVATE LTD (AEPL); previously Hartford Alternative Energy Private Ltd

Development of **50 MW Wind Power Project** in Jhimpir, Sindh, Pakistan, the first Wind Power Project by Artistic Milliners Limited. RE2 are the Owner's Engineer for the Project in cooperation with Tractebel Engie GmbH(TEG) previously called as Lahmeyer International. for the entire development and construction phase. The Project achieved COD in 2018.

MASTER GREEN ENERGY LTD.

50 MW MGEL is the second Wind Power Project by Master Group (MWL). Project Development and Construction Supervision services were provided by RE2. The involvement is full time technical support to the project as Owner's Engineer. The project has achieved COD in 2021. RE has TEG's support in the development, particularly the wind studies.

TRICOM WIND POWER (PVT.) LIMITED

Project Development and Construction Supervision services were provided to **50 MW Tricom Wind Power (Pvt.) Ltd** in Jhimpir-Sindh. The involvement is full time technical support to the project. The project has achieved COD in 2021. RE2 has TEG's support in the development, particularly in the wind studies.

GUL AHMED ELECTRIC LTD (GEL).

Development of the second Wind Power Project by Gul Ahmed Energy Ltd (GAEL); **GEL 50MW Wind Power Project** in Jhimpir-Sindh, Pakistan is being conducted by RE2. The involvement is full time technical support to the project. The project has achieved the Financial Close (FC) on 18th Nov, 2019. The project achieved COD in 2022. RE2 provided the services of Owner's Engineer and Tractebel Engie GmbH (TEG) previously called as Lahmeyer International supported in the development, particularly in the wind studies.

METRO WIND ENERGY LTD.

Development of **60 MW Wind Power Project** in Jhimpir -Sindh, Pakistan is being conducted by RE2. It is the second Wind Power Project by Metro Energy Ltd (MEL). The involvement is full time technical support to the project. The project has achieved the Financial Close (FC) on 18th Nov, 2019. The project achieved COD in 2022. RE2 provided the services of Owner's Engineer and Tractebel Engie GmbH (TEG) previously called as Lahmeyer International supported in the development, particularly in the wind studies.

ACT – II WIND (PVT) LTD

50 MW ACT-II is the second Wind Power Project by Tapal Wind Energy Ltd (TWEL). Project Development of **50 MW ACT-II Wind (Pvt.) Ltd** in Jhimpir-Sindh, Pakistan is being conducted by RE2. The involvement is full time technical support to the project. The project has achieved the Financial Close (FC) on 18th Nov, 2019. The project achieved COD in 2022. RE2 provided the services of Owner's Engineer and Tractebel Engie GmbH (TEG) previously called as Lahmeyer International supported in the development, particularly in the wind studies.

LAKE SIDE ENERGY (PVT.) LTD

Development of **50 MW Lake Side Energy (Pvt.) Ltd** in Jhimpir-Sindh, Pakistan is being conducted by RE2. The involvement is full time technical support to the project. The project has achieved the Financial Close (FC) on 18th Nov, 2019. The project achieved COD in 2022. RE2 provided the services of Owner's Engineer and Tractebel Engie GmbH (TEG) previously called as Lahmeyer International supported in the development, particularly in the wind studies.

NASDA GREEN ENERGY (PVT.) LTD

Development of **50 MW NASDA Green Energy** in Jhimpir-Sindh, Pakistan is being conducted by RE2. The involvement is full time technical support to the project. The project has achieved the Financial Close (FC) on 18th Nov, 2019. The project achieved

COD in 2022. RE2 provided the services of Owner's Engineer and Tractebel Engie GmbH(TEG) previously called as Lahmeyer International supported in the development, particularly in the wind studies.

LIBERTY WIND POWER 1 PVT LTD; previously ZULAIKHA ENERGY PVT LTD

Development of **50 MW ZULAIKHA Energy (Pvt.) Project** in Jhimpir-Sindh, Pakistan is being conducted by RE2. The involvement is full time technical support to the project. The project has achieved the Financial Close (FC) on 18th Nov, 2019. The project achieved COD in 2022. RE2 provided the services of Owner's Engineer and Tractebel Engie GmbH(TEG) previously called as Lahmeyer International supported in the development, particularly in the wind studies.

LIBERTY WIND POWER 2 PVT LTD; previously NOOR SOLAR WIND ENERGY PVT. LTD

Development of **50 MW Noor Solar Wind Energy (Pvt.) Ltd** in Jhimpir-Sindh, Pakistan is being conducted by RE2. The involvement is full time technical support to the project. The project has achieved the Financial Close (FC) on 18th Nov, 2019. The project achieved COD in 2022. RE2 provided the services of Owner's Engineer and Tractebel Engie GmbH(TEG) previously called as Lahmeyer International supported in the development, particularly in the wind studies.

DIN ENERGY (PVT.) LTD

Development of **50 MW DIN Energy (Pvt.) Ltd** in Jhimpir-Sindh, Pakistan is being conducted by RE2. The involvement is full time technical support to the project. The project has achieved the Financial Close (FC) on 18th Nov, 2019. The project achieved COD in 2022. RE2 provided the services of Owner's Engineer and Tractebel Engie GmbH(TEG) previously called as Lahmeyer International supported in the development, particularly in the wind studies.

INDUS WIND ENERGY LIMITED

Development of **50 MW Indus Wind Energy (Pvt.) Ltd** in Jhimpir-Sindh, Pakistan is being conducted by RE2. The involvement is full time technical support to the project. The project has achieved the Financial Close (FC) on 18th Nov, 2019. The project achieved COD in 2022. RE2 provided the services of Owner's Engineer and Tractebel Engie GmbH(TEG) previously called as Lahmeyer International supported in the development, particularly in the wind studies.

TAPAL WIND ENERGY (PVT.) LTD

Project Development of **30 MW Wind Power Project** in Jhimpir, Sindh – Pakistan; the project is in construction phase. RE2 was involved in the development phase for undertaking the feasibility study. Thereafter, RE2 together with LI entered into a lender's engineer role for the due diligence and construction supervision. The COD was achieved in the 4th quarter of 2016.

NATIONAL BANK OF PAKISTAN

RE2 was the Lender's Engineer for Fauji Wind Energy **2X50 MW Wind Power Projects (FWE-I & FWE-II)** in Gharo, Sindh Pakistan, in partnership with Lahmeyer International. The services were provided to a consortium of banks including **Asian Development Bank (ADB), Islamic Development Bank (IDB)** and a consortium of local banks led by **NPB**. RE2 / LI were also appointed as the Owner's Engineer along with the Lender's Engineer whilst keeping a Chinese wall in between.

RE2 provided due diligence and construction monitoring services as Lender's Engineer for Tapal Wind Energy **30 MW Wind Power Project** in Jhimpir, Sindh Pakistan, in partnership with Lahmeyer International. The services were provided to National Bank of Pakistan.

HABIB BANK LIMITED OF PAKISTAN

RE2 has been involved as Lender's Engineer for Yunus Energy **50 MW Wind Power Project** in Jhimpir, Sindh Pakistan, in partnership with Lahmeyer International. Lender's Engineer services were provided to a consortium of banks including **Habib Bank Limited of Pakistan, United Bank Limited, MCB Bank Limited, Faysal Bank Limited** and **Allied Bank Limited** of Pakistan. RE2 / LI were also appointed as Owner's Engineer along with the Lender's Engineer keeping the Chinese wall in between.

INTERNATIONAL FINANCE CORPORATION (IFC)

RE2 was Lender's Engineer for Zorlu Energy **50 MW Wind Power Project** in Jhimpir, Sindh, Pakistan, in partnership with Lahmeyer International. Lender's Engineer services are provided to a consortium of banks including **IFC, Asian Development Bank (ADB) and Habib Bank Limited of Pakistan**. The projects have achieved CODs.

RE2 provided due diligence services as Lender's Engineer for Metro Power **50 MW Wind Power Project** in Jhimpir, Sindh Pakistan, in partnership with Lahmeyer International. The services were provided to IFC and consortium of local banks for due diligence and construction monitoring.

JAMSHED WIND ENERGY PRIVATE LTD (JWEL)

The project is the third wind power project by Master Group. Project development of **50 MW Wind Power Project** in Jhimpir, Sindh, Pakistan is being conducted by RE2; the project is in the development phase. The involvement is full time technical support to the project. The project is currently at licensing and tariff stage. RE2 has Tractebel Engie GmbH(TEG) previously called as Lahmeyer International support in the development, particularly in the wind studies.

UNI ENERGY (PVT.) LTD

Development of **50 MW Uni Energy Wind (Pvt.) Ltd** in Jhimpir-Sindh, Pakistan is being conducted by RE2. The involvement is full time technical support to the project. The project is currently at licensing and tariff stage. RE2 has Tractebel Engie GmbH(TEG) previously called as Lahmeyer International support in the development, particularly in the wind studies.

SHAFFI ENERGY (PVT.) LIMITED

Development of **50 MW Shaffi Energy (Pvt.) Ltd** in Jhimpir-Sindh, Pakistan is being conducted by RE2. The involvement is full time technical support to the project. The project is currently at licensing and tariff stage. RE2 has Tractebel Engie GmbH(TEG) previously called as Lahmeyer International support in the development, particularly in the wind studies.

LUCKY WIND POWER LTD

Development of 50 wind power project in Jhimpir-Sindh, Pakistan is being conducted by RE2. The involvement is full time technical support to the project. The project is currently at licensing and tariff stage.

Trans Atlantic Energy (PVT.) LIMITED

Development of Feasibility study for **50 MW Trans Atlantic Energy (Pvt.) Ltd** in Jhimpir-Sindh, Pakistan is being conducted by RE2. The involvement is full time technical support to the project

Western Energy Pvt. Limited

Development of Feasibility study for **50 MW Western Energy (Pvt.) Ltd** in Jhimpir-Sindh, Pakistan is being conducted by RE2. The involvement is full time technical support to the project

Solar Power

3X50MW NIZAM-SCATEC

SCATEC Solar is an integrated independent solar power producer, delivering affordable, rapidly deployable and sustainable source of clean energy worldwide. The company has 383 MW of solar power plants in operation. Development of **3X50 MW Solar PV Power Project** near Sukkur-Sindh, Pakistan is in process. The feasibility of the project has been approved by DDAE-GoS.

MI SOLAR (PVT.) LTD

Project Development of **20 MW Solar PV Power Project** in Jamshoro-Sindh, Pakistan is in process. The involvement is full time technical support to the project. The project is currently at licensing and tariff stage.

GUL AHMED SOLAR POWER LTD (GASPL).

Project Development of **50 MW Solar PV Power Project** in Jhimpir-Sindh, Pakistan is in process. The feasibility of the project has been submitted to DAE-GoS. The involvement is full time technical support to the project. The project is currently at licensing and tariff stage. RE2 has Tractebel Engie GmbH (TEG) previously called as Lahmeyer International support in the development, particularly in the solar resource studies.

METRO SOLAR POWER LTD (MSPL).

Project Development of **50 MW Solar PV Power Project** in Jhimpir-Sindh, Pakistan is in process. The feasibility of the project has been submitted to DAE-GoS. The involvement is full time technical support to the project. The project is currently at licensing and tariff stage. RE2 has Tractebel Engie GmbH (TEG) previously called as Lahmeyer International support in the development, particularly in the solar resource studies.

100 MW ZHENFA PAKISTAN NEW ENERGY COMPANY LTD (ZPNECL)

ZPNECL is being developed in Layyah-Bhakkar, Punjab, Pakistan by RE2. The feasibility of the Project has been approved from Punjab Power Development Board (PPDB). The involvement is full time technical support to the project. The project is currently at licensing and tariff stage.

ROSHAN POWER (Pvt.) LTD

Development of **10 MW Solar PV Power Project** in Kasur, Punjab, Pakistan is in process. The feasibility of the Project was submitted to PPDB and has been approved. The involvement is full time technical support to the project. The project is currently at licensing and tariff stage.

100 MW ZORLU SOLAR PAKISTAN (PVT.) LTD (ZSPPLL)

ZSPPL is being developed in Quaid-e-Azam Solar Park, Bahawalpur-Punjab, Pakistan by RE2. The feasibility of the Project has been approved by Punjab Power Development Board (PPDB). The involvement is full time technical support to the project.

Solar Power

2 x 100 MW ZORLU SUN POWER (PVT.) LTD & ZORLU RENEWABLE (PVT.) LTD

RE2 has been appointed as Owner's Engineer for project development of the upcoming (2) 100MW solar power projects by Zorlu Energy Group, Turkey.

FIRST SOLAR (Pvt.) LTD

Project Development of **2 MW Solar PV Power Project** in Kallar Kahar, Punjab, Pakistan is in process. The feasibility of the project has been approved from AEDB.

TECHNICAL DUE DILIGENCE OF 100 MW QUAID-E-AZAM SOLAR POWER PVT LTD

Technical Due Diligence conducted by RE2 on behalf of Master and Gul Ahmed Group installed by the Punjab Government in 2015. The TDD consisted of reviewing the Feasibility Study Report, ongoing operation and maintenance reports, security documents and evaluating solar resource potential at the Project site. The Sponsors aim to bid for this Project and aims to realize this Project, if awarded, and opt for a suitable Tariff.

TECHNICAL DUE DILIGENCE OF OURSUN 50 MW in Gharo-Sindh (client Mari Petroleum)

Technical Due Diligence conducted by RE2 on behalf of Mari Petroleum in 2019. The TDD consisted of reviewing the Feasibility Study Report, ongoing operation and maintenance reports, security documents and evaluating solar resource potential at the Project site. The Sponsors aim to bid for this Project and aims to realize this Project, if awarded, and opt for a suitable Tariff.

TECHNICAL DUE DILIGENCE OF SOLIS ENERGY SOLUTIONS PVT. LTD 26.6 MW (CLIENT: NATIONAL BANK OF PAKISTAN, ASKARI BANK LTD)

Technical Due Diligence conducted by RE2 on behalf of National Bank of Pakistan in 2021. The TDD consisted of reviewing the Feasibility Study Report, ongoing operation and maintenance reports, security documents and evaluating solar resource potential at the Project site. The Sponsors aim to bid for this Project and aims to realize this Project, if awarded, and opt for a suitable Tariff.

KHADIM-E-PUNJAB UJAALA PROGRAM

Renewable Resources Pvt Ltd is working with Lahmeyer International and Engineering Consultancy Services Punjab Ltd for the consultancy of Khadim e Aala Ujala Project (KPUP), under KPUP project. Energization of 20000 schools completed in year 2019.

Beaconhouse Solarization of the Schools

Beacon House School System is interested to setup solar systems on the 40 sites situated at different locations in Pakistan. Renewable Resources Pvt Limited was requested to design and support client in tendering for the construction of the project.

Solar Power

EQUICAP ASIA PTE LTD. Pakistan

EQUICAP ASIA PTE LTD. Pakistan is intending to invest in the field of solar power distribution in Pakistan. Therefore, had hired Renewable Resources (Pvt.) Limited to research and analyze potential market, regulatory regimes, Tariff and cost along with benefits and potential risks of the investment. As well as prepare technical feasibility report for 5 industries in different part of the Country.

Naveena Denim Pvt. Ltd. Lahore

Naveena Denim is interested to setup solar systems on the roof top of their factory situated at Lahore, Pakistan. Renewable Resources Pvt Limited was requested to design and support client in tendering for the construction of the project.

TRANSACTIONAL ADVISORY FOR UTILITY SCALE SOLAR

The Government of Sindh intended to develop and pilot a sustainable cost-effective competitive procurement scheme to deploy solar photovoltaic (PV) power plants in Sindh province, with wider relevance to the whole of Pakistan. Therefore, it is intended to develop and implement tendering mechanisms for the 400 MWs solar parks according to the international best practices following World Bank Procurement Regulations as well as Pakistan's specific NEPRA Regulations shall apply. RE2 is providing the services as technical advisor along with other consortium partners.



Hybrid Power

Up to 100MW Solar PV Grid Power Hybrid Project sponsored by China Three Gorges South Asia Investment (PVT) LTD.

Project Development of **100MW hybrid projects for China Three Georges Group** over existing land. The sponsor company has got the LOI from AEDB in effort to increase the overall plant utilization capacity of the 3*50 MW Wind Farms that are TGF, TGS & TGT.

Up to 15 MW Solar PV Power Hybrid Project at 84 MW New Bong Escape Hydropower Plant.

The development of a 15 MW Solar PV and Grid Power Hybrid Project in Mirpur, Azad Jammu & Kashmir, Pakistan is underway at the site of the 84 MW New Bong Escape Hydropower Plant, with the aim of increasing the overall utilization capacity of the Hydropower plant.

Up to 50 MW Solar PV Grid Power Hybrid Project sponsored by Master Wind Power (PVT) LTD.

Project Development of **up to 50 MW Solar PV Grid Power Hybrid Project** in Jhimpir - Sindh, Pakistan is in process at the land of 50MW Master Wind Power Project. The sponsor company has got the LOI from AEDB in effort to increase the overall plant utilization capacity of the 50 MW Wind Farm.

Up to 50MW Solar PV Grid Power Hybrid Project sponsored by Zorlu Wind Power (PVT) LTD.

Project Development of **up to 50 MW Solar PV Grid Power Hybrid Project** in Jhimpir - Sindh, Pakistan is in process at the land of 50MW Zorlu Wind Power Project. The sponsor company has got the LOI from AEDB in effort to increase the overall plant utilization capacity of the 50 MW Wind Farm.

Up to 50MW Solar PV Grid Power Hybrid Project sponsored by GUL AHMED ENERGY LTD.

Project Development of **up to 50 MW Solar PV Grid Power Hybrid Project** in Jhimpir - Sindh, Pakistan is in process at the buffer land of 50MW Gul Ahmed Wind Power Project. The sponsor company has got the LOI from AEDB in effort to increase the overall plant utilization capacity of the 50 MW Wind Farm.

400 MW SOLAR PROJECT BY CHINA THREE GORGES SOUTH ASIAN INVESTMENTS LTD (CTGSAIL).

RE2 has just signed the portfolio of total 400 MW Solar PV Project in Sindh sponsored by CTGSAIL. The project is at initial stages of development. At this time the Land assessments in Southern part of Pakistan, which have now been converted to Hybrid Projects.

Hybrid Power

Up to 50MW Solar PV Grid Power Hybrid Project sponsored by METRO SOLAR POWER COMPANY LTD wind power project.

Project Development of **up to 50 MW Solar PV Grid Power Hybrid Project** in Jhimpir - Sindh, Pakistan is in process at near 50MW Metro wind power project. The sponsor has received the LOI from AEDB in effort to increase the overall plant utilization capacity of the 50 MW wind farm.

Up to 50MW Solar PV Grid Power Hybrid Project sponsored by YUNUS ENERGY LTD wind power project.

Project Development of **up to 50 MW Solar PV Grid Power Hybrid Project** in Jhimpir - Sindh, Pakistan is in process at near 50MW Yunus wind power project. The sponsor has received the LOI from AEDB in effort to increase the overall plant utilization capacity of the 50 MW wind farm.

Up to 25 MW Artistic Milliners Solar PV Grid Power Hybrid Project by Hartford Alternate Energy Ltd.

Project Development of **up to 25 MW Solar PV Grid Power Hybrid Project** in Jhimpir - Sindh, Pakistan is in process at near 50MW Hartford Alternate Energy Wind Power Project. The sponsor has received the LOI from AEDB in effort to increase the overall plant utilization capacity of the 50 MW wind farm

Up to 50MW Solar PV Hybrid Grid Power Project sponsored by METRO POWER COMPANY LTD wind power project.

Project Development of **up to 50 MW Solar PV Hybrid Grid Power Project** in Jhimpir - Sindh, Pakistan is in process at near 50MW Metro wind power project. The sponsor has received the LOI from AEDB in effort to increase the overall plant utilization capacity of the 50 MW wind farm.

Up to 80MW Solar PV and Wind Hybrid Power Project for Amreli Steels, Karachi

Amreli Steels Ltd. intended to install upto 80 MW of solar and wind hybrid system for their steel manufacturing plant located in Karachi. The RE2 is providing complete technical services for the development of bankable feasibility study and supervision services during construction phase. The project is under development and expected to be completed by 2023.

20.4 MW GAWALDAI HYDRO POWER PROJECT

Project Development of approximately **20.4 MW Hydro Power Project** in Upper Dir, KPK, Pakistan is underway. The R-o-R Project is being sponsored by Aasal Hydrotech and Steels (Pvt.) Ltd. The feasibility of the project shall be reviewed by the authorities and accordingly the Project Sponsors shall opt for a suitable Tariff and EPC Contractor selection via bidding process.

6.9 MW ZHANDRAI KHWAR (SERAI) HYDRO POWER PROJECT

Project Development of approximately **6.9 MW Hydro Power Project** in Upper Dir, KPK, Pakistan is underway. The R-o-R Project is being sponsored by Aasal Hydrotech and Steels (Pvt.) Ltd. The feasibility of the project shall be reviewed by the authorities and accordingly the Project Sponsors shall opt for a suitable Tariff and EPC Contractor selection via bidding process.

TECHNICAL DUE DILIGENCE OF 100 MW ARKARI GOL HYDRO POWER PROJECT

Master Green Energy Limited is interested in bidding for this Project. For this, TEG formerly called as Lahmeyer International and RE2 to conduct the Technical Due Diligence of the solicited Hydro Power Project by Pakhtunkhwa Energy Development Organization (PEDO). The TDD consisted of reviewing the Feasibility Study Report shared by Pakhtunkhwa Energy Development Organization. Accordingly, the Project Sponsors have bid for this Project and aims to realize this Project, if awarded, and opt for a suitable Tariff.

TECHNICAL DUE DILIGENCE OF 6 MW JHING-2 HYDRO POWER PROJECT

EPTP, sponsors for HAWA Energy (Pvt.) Ltd (Wind Power Project) was interested in acquiring this R-o-R Project in Azad Jammu and Kashmir, Pakistan. For this, EPTP hired RE2 and Lahmeyer Hydropower Project to conduct the Technical Due Diligence of the Project. Upon review the Project was not considered as an attractive investment and the Project was not pursued further.

SUKHI KINARI 870 MW HYDRO POWER PROJECT

870 MW Suki Kinari Hydropower project is one of the largest private sector hydropower initiatives in Pakistan. Envisaged to produce 3050 GWh annually, this mega project alone is expected to substantially increase Pakistan's existing available power generation capacity. A Run of the River project, the project poses minimal environmental and social impacts and due to its high design head of 900 meters and relatively short Intake Structure crest, it is considered one of the most cost-effective hydropower schemes in the region. Being developed by internationally renowned and financially and technically established sponsors, this landmark project is poised to set a new precedent in private sector hydropower development in Asia.

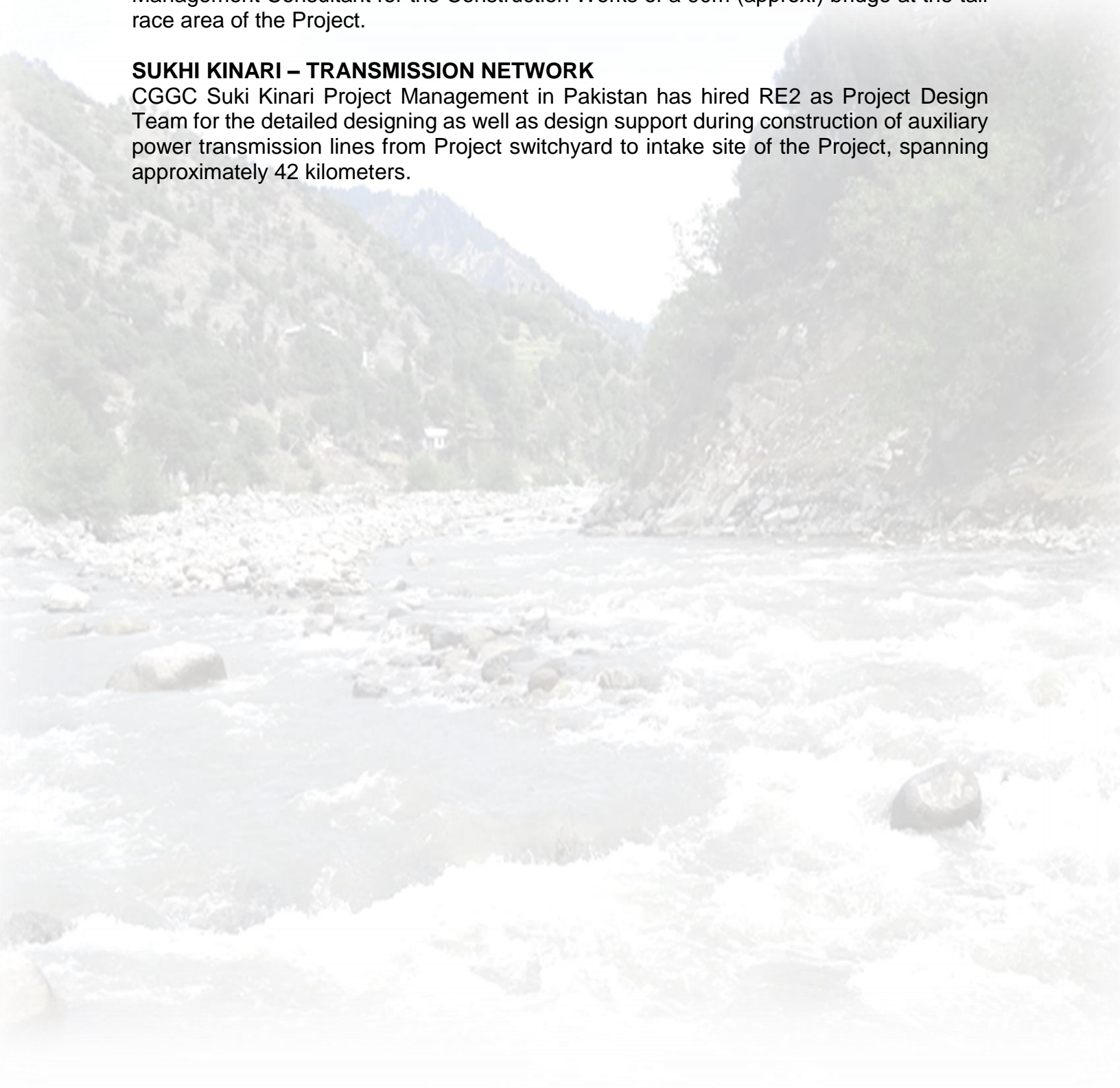
Hydro Power

SUKHI KINARI – PERMANENT BRIDGE AT TRIAL RACE AREA

CGGC Suki Kinari Project Management in Pakistan has hired RE2 as Project Management Consultant for the Construction Works of a 90m (approx.) bridge at the tail race area of the Project.

SUKHI KINARI – TRANSMISSION NETWORK

CGGC Suki Kinari Project Management in Pakistan has hired RE2 as Project Design Team for the detailed designing as well as design support during construction of auxiliary power transmission lines from Project switchyard to intake site of the Project, spanning approximately 42 kilometers.



Thermal Power

MALAKWAL POWER (PVT.) LTD OWNED BY BEACONHOUSE GROUP

RE2 has done the feasibility of this **50MW Thermal Power Projects** which is been approved by Punjab Govt. .

660 MW Coal Power Plant for Lucky Electric Power Company Limited

The United Bank Limited in lending the 660 MW coal power project by Lucky group. The RE2 is providing technical advisory services to UBL for successful financing. This Project achieved its COD in year 2022.

HABIB BANK LIMITED (HBL) – RE2’s Role as a Lender’s Engineer

ENGRO THAR POWER LTD (ETPL)

ETPL is 2x330 MW (total 660 MW) mine mouth project at Thar. RE2 is monitoring the project and payment schedule for HBL. EPTL obtained Generation License from NEPRA effective on March 18, 2015. Subsequently, EPTL also received Letter of Support from Private Power and Infrastructure Board (PPIB) dated April 17, 2015. On May 4, 2015, EPTL entered into Power Purchase Agreement (PPA) with National Transmission and Dispatch Company and Implementation Agreement (IA) and Supplemental IA with Islamic Republic of Pakistan. During the year, EPTL finalized its envisaged shareholding structure and signed financing agreements with local and foreign lenders. Engro Powergen Limited will be the majority ordinary shareholder in the project with a proposed 51% common equity investment. Rest of the equity is planned from the CMEC Thar Power Investments Limited and other local investors (Habib Bank Limited and Liberty Mills). Major financing agreements were executed on December 21, 2015. Financial close and disbursement of loan is expected after execution of security documents, issuance of guarantee and completion of legal formalities.

FATIMA ENERGY LTD (FEL)

FEL is 120 MW coal/bagas co-generation power plant at Sanawan, near Multan. RE2 is monitoring the project and payment schedule for HBL. After completing the construction & commissioning phase FEL achieved the COD in May 2017.

900MW BQPS-III CCPP THERMAL POWER PROJECT INCLUDING ASSOCIATED FOUR GRID STATIONS

RE2 is currently providing its services as Owner’s Engineer to K-Electric for “**900 MW BQPS-III CCPP Thermal power project**”. The RE2 is working in JV with NESPAK and TEG, Germany.

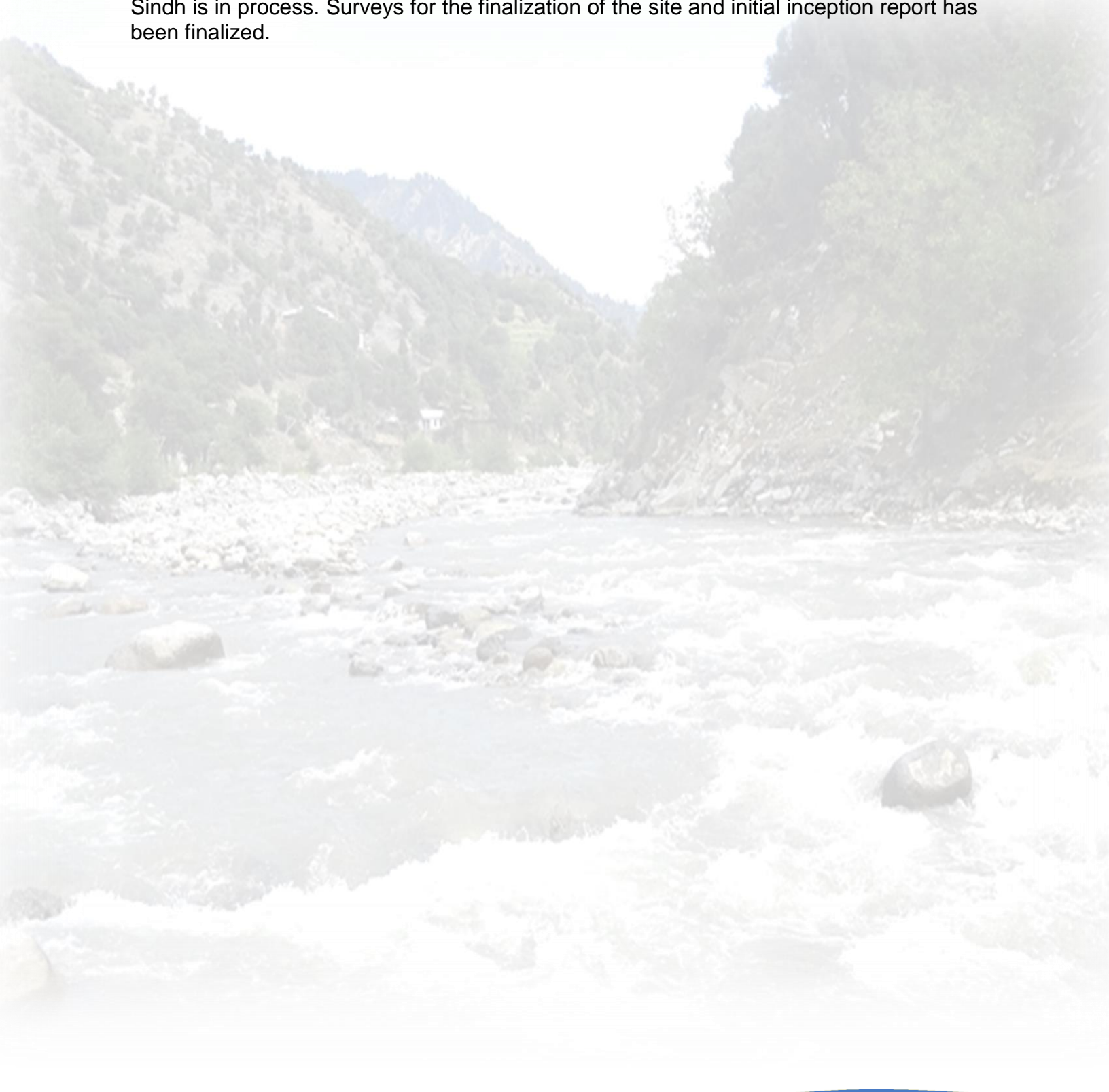
330MW THAL NOVA Energy Pvt. Ltd & 330MW THAR Energy Ltd

RE2 has been appointed as Lender’s Engineer at two coal power plants, which are **330MW THAL NOVA Energy Pvt. Ltd & 330MW THAR Energy Ltd**.

Thermal Power

- **KETI BANDAR COAL POWER PLANT OWNED BY GOVT. OF SINDH**

Development of 1320MW coal fired power plant in Keti Bandar owned by Government of Sindh is in process. Surveys for the finalization of the site and initial inception report has been finalized.



PROMOTING SUSTAINABLE ENERGY PRODUCTION AND USE OF BIOMASS IN PAKISTAN – A PROJECT OF WINROCK / UNIDO.

During this project, various biomass resources were analyzed and validated for possible technological options for making sustainable use of existing biomass resources. The major output of the project was the development of three pre-feasibilities for pilot projects, two for SMEs and one for village electrification was designed considering *inter alia* costs, associated income generation activities, co-financing, GHG emissions reduction, monitoring and evaluation plans.

15 MW HIGH PRESSURE BAGGASE BASED POWER GENERATION PROJECT OF HAMZA SUGAR MILLS LIMITED

Hamza Sugar Mills Limited got an LOI for the development of 15 MW high pressure based power generation Project at Jhetta Bhutta Khanpur, District Rahimyar Khan. RE2 supported the project for the development of the Project including Initial Environmental Examination and the EPA.

120 MW BIOMASS POWER PROJECT OF FATIMA ENERGY LIMITED

RE2 is the Lender's Engineer for Fatima Energy **120 MW Biomass Project** at Mehmoodkot Muzaffargarh in partnership with Lahmeyer International. Lender's Engineer services are being provided to **Habib Bank Limited of Pakistan.**

The project is located beside an existing sugar mill belonging to Fatima Sugar Mills Ltd (FMSL), the Sponsor. The power plant will mainly utilize bagasse produced by the sugar mill as fuel during the 4 months of cane crushing season and will burn imported coal at all other times.

LENDER'S TECHNICAL ADVISORY SERVICES FOR MALIR EXPRESSWAY PROJECT, KARACHI

Malir Expressway Pvt. Limited was undertaking the construction of Malir Expressway – an exclusive, high-speed access-controlled corridor which starts from the right bank of Malir River and ends at the existing Link Road between N5 and M9 in Karachi. Government of Sindh intended this Project to be procured under PPP (“Public Private Partnership”) mode on a turnkey DFBOT (Design, Finance, Build, Operate and Transfer) arrangement.

The RE2 was contacted by Lenders of this project for pre-financial close advisory. The RE2 conducted a detailed technical due-diligence and identified the potential risks and way forwards. The project is expected to achieve financial close in last quarter of 2021.

Other Projects

- Development of Micro Finance System for MFIs / DFIs to support Off-Grid Solar PV Applications – A Project of GTZ.
- Development of microfinance schemes for solar households in Pakistan – A Project of ENERCON
- Feasibility of Cultivation and Production of Biodiesel in Cholistan Punjab Pakistan-A Project of DACC Power Generation Company Pvt. Limited.
- Renewable Resources (Pvt) Ltd has been working with Lahmeyer International as their local partner to provide the Government of Pakistan with the tools, analysis and capacity to ensure that long-term electricity sector planning fully accounts for the integration of **Variable Renewable Energy** (VRE).To assess the role that VRE could play in lowering the average cost of power generation, increasing energy security and reducing environmental impacts including climate change.
- **Pakistan Power Sector Improvement** Activity: The **Pakistan Power Sector Improvement Activity** (PSIA) is a four-year, \$23.5M Activity aiming to increase the financial viability, reliability, and affordability of Pakistan's power system. PSIA supports USAID's focus on facilitating long-term solutions to energy issues through increased engagement with the private sector. RE2 is support and technical consultant in this project. This Project started in Year 2022

Project Gallery



Glimpse of LANDHI Grid of K-Electric, Karachi



Glimpse of Switchyard 900MW RLNG BQPS-III, Karachi



Glimpse of Control Room of Q&K Substation, Karachi

Project Gallery



Glimpse of 50MW Liberty 1 Wind Power Project, Jhampir



Glimpse of 50MW METRO Wind Power Project, Jhampir



Glimpse of 50MW NASDA Wind Power Project, Jhampir

Project Gallery



Glimpse of 50MW INDUS Wind Power Project, Jhimpir



Glimpse of 50MW GUL AHMED Wind Power Project,
Jhimpir



Glimpse of 50MW TRICOM Wind Power Project, Jhimpir

Project Gallery



Glimpse of QASP project site in Bahawalpur, Punjab



HAWA Wind Project Turbine Erection in Progress



AEPL Project Turbine Erection in Progress

Project Gallery



MGEL Wind Project at Dusk in Jhimpir, Sindh - Pakistan



TGF Wind Project by CTG, in Jhimpir, Sindh - Pakistan

Project Gallery



Solarization of Schools under Khadim-e-Punjab
Ujala Program , Punjab



Design Consultancy for Solarization of Schools,
Beacon House Schooling System



Site Visit to Gwaldai and Serai Hydro Projects by
AHTS, in Dir, KPK - Pakistan



Site Visit to Bulanda Hydro Project by Khyber Power,
in FATA region - Pakistan

Environment



Community Consultation by RE2 & Lenders team with Locals for Zorlu Solar Pakistan Pvt. Limited, in Bahawalpur, Punjab - Pakistan



Compliance monitoring at UEP win power project in Jhimpir, Sindh, Pakistan



Community Consultation with Locals for Ismail Industries' Wind Power Project in Jhimpir, Sindh-Pakistan



Consultation with government authorities for project development



Public Consultation with Locals for Hawa Wind Power Projects in Jhimpir, Sindh - Pakistan



Lender Team Site Visit and community consultation with locals Ltd for wind power project in Jhimpir, Sindh-Pakistan

Environmental studies (EIA/IEE) are required for every development project as per Pakistan Environmental Protection Act, 1997.

As consultants of RE projects, RE2 has already conducted more than 55 environmental studies of wind, solar and hydel power projects, duly approved by relevant Environmental Protection Agencies as well as international lenders (OPIC, IFC, ADB and FMO). RE2 has also prepared the ESMMP and ESIA documents for the lenders to finance the project. RE2 has also conducted environmental studies in relation to housing societies. Moreover, RE2 is employed as an Independent Monitoring Consultant (IMC) in various wind projects across Jhimpir, Sindh and also in K-Electric Limited, Karachi-Sindh. RE2 has also conducted the Environmental and Social Screening checklists and prepared the ESMP's for the establishment of Rescue 1122 stations in different locations of Sindh province under Provincial Disaster Management Authority (PDMA) financed by The World Bank. RE2 has also hired as a lender's technical consultant by Asian Development Bank in two different projects located in Sindh and Baluchistan province (Environmental and social compliance audit of HVUB and KKI grid station & transmission line projects by KE). In these projects, KE is seeking a corporate loan from Asian Development Bank

Environment

(ADB) to rehabilitate and expand its transmission and distribution network, focusing on these two projects. 500kV KKI grid station and transmission line (TL), Hub, Vinder, Uthal and Bela grid station and TL. RE2 has also expertise in CERs, Net-Zero emission reduction and Energy Efficiency for decarbonization.

RE2 is experienced in implementing and monitoring environmental health safety and social management system per customized operating procedures and national & international standards.

RE2 uses special computer-aided software for shadow analysis and noise analysis for wind power projects.

So far, RE2 has conducted following Environmental studies of renewable energy projects which have been approved from the concerned Environmental Protection Agencies.

- IEE of 50 MW Wind Power Project of Master Wind Energy Pvt. Ltd in Jhimpir
- IEE of 50 MW Wind Power Project of Three Gorges First Wind Farm Pakistan (Pvt.) Ltd in Jhimpir
- IEE of 50 MW Wind Power project of Zephyr Power (Pvt.) Ltd in Gharo
- IEE of 50 MW Wind Power Project of New Park Energy (Pvt.) Ltd in Gharo
- IEE of 42 MW Wind Power project of DHA City Karachi
- IEE of 05 MW Wind Power Project of Pakistan Wind Energy Generation (Pvt.)Ltd in Jhimpir
- EIA of 100 MW Wind Power Project of UEP Wind Power Pvt. Ltd
- IEE of 2 X 50 MW Wind Power Project of Wind Eagle-1 & Wind Eagle-2
- IEE of 30 MW Wind Power Project of Tapal Wind Pvt. Ltd
- IEE of 2 x 5 MW Solar Power Project of TechAccess FZE L.L.C in Pind Dadan Khan
- IEE of 02 MW Solar Power project of First Solar Pvt. Ltd in Kalar Khar, Punjab
- IEE of 50 MW Solar power Project of DACC Power Generation Company Limited
- IEE of 10 MW Solar Power Project of Roshan Power Pvt. Ltd in Kasur Punjab Pakistan
- IEE of 50 MW Thermal Power Project of Malakwal Power in Punjab Pakistan
- IEE of 15 MW Bagasse Power project of Hamza Sugar Mills Limited in Rahim Yar Khan, Punjab
- IEE of 200 MW Frontier Renewable Energy Limited in, Jhimpir Sindh
- IEE of 100 MW Zhenfa Pakistan New Energy Company Ltd in Layyah, Punjab
- IEE of 20 MW MI Solar, in Jamshoro Sindh
- IEE of 3 x 50 MW NIZAM SCATEC Solar Power Plants, in Sukkur, Sindh
- IEE of 50 MW Wind Power Project Gul Ahmed Electric Limited, in Jhimpir Sindh
- IEE of 60 MW Metro Wind Energy Limited, in Jhimpir, Sindh
- IEE of 50 MW Solar Power Project Gul Ahmed Solar Power Ltd, in Jhimpir, Sindh
- IEE of 50 MW Solar Power Project, Metro Solar Power Limited, in Jhimpir, Sindh
- IEE of 50 MW Lakeside Energy (Pvt) Ltd, in Jhimpir, Sindh
- IEE of 50 MW Act II Wind (Pvt) Limited, in Jhimpir, Sindh
- IEE of 50 MW Artistic Wind Power (Pvt) Ltd, in Jhimpir, Sindh
- IEE of 50 MW Solar Power Project, Forshine Solar Pakistan (Pvt) Ltd, Jhimpir, Sindh
- IEE of 50 MW Wind Power Project, Hawa Energy (Pvt) Ltd, in Jhimpir, Sindh
- IEE of 50 MW Wind Power Project ,UniEnergy Limited in Jhimpir, Sindh
- IEE of 50 MW Shaheen Renewable Energy 1, in Bholari, Jhimpir region, Sindh

Environment

- IEE of 100 MW Master Green Energy Limited, in Jamshoro Sindh
- IEE of 100 MW Solar Power Project, Zorlu Solar Pakistan Pvt. Ltd, in Bahawalpur
- IEE of 50 MW Wind Power Project, Yunus Energy Pvt. Ltd. in Jhimpir, Sindh
- IEE of 20.4 MW Hydro Power Project, Asal Hydrotech and Steel Pvt. Ltd, in Gwaldai, Upper Dir, KPK.
- IEE of 6.9 MW Hydro Power Project, Asal Hydrotech and Steel Pvt. Ltd, in Serai, Upper Dir, KPK
- EIA of 40 MW Hydro Power Project, Khyber Power Pvt. Ltd, in Khyber Agency, FATA
- IEE of 100 MW PV grid hybrid Power Project, China Three Gorges South Asian Investment Ltd, in Jhimpir, Sindh
- IEE of 25 MW PV Grid Hybrid Power Project, Artistic Milliners Pvt. Ltd, in Jhimpir, Sindh
- IEE of 13 sites for 26.6 MW Solar PV Project in Army Garrisons (Pakistan Army) GHQ by Solis Energy Solutions Pvt. Ltd
- IEE of 50 MW Trans Atlantic Energy Ltd wind Power Project in Jhimpir, Sindh
- Establishment of rescue 1122 stations at different Locations of Sindh Province (Preparation of Environmental and Social Screening Checklist and Environmental and Social Management Plan for all the sites by Provincial Disaster Management Authority (PDMA) under the umbrella of Sindh Resilience Project (SRP) sponsor by the World Bank

BQPS-III 900 MW RLNG Based Combine Cycle Power Plant and Associated Transmission projects to prepare the Environmental and Social Assessment Report as an Independent Monitoring Consultant hired by K-Electric Limited.

The Partnership!

*Alone we can do so little; together
we can do so much – Hellen Keller*

International Collaboration with Tractebel Engineering GmbH, Germany

Tractebel Engineering GmbH (TEG) is amongst the world leaders in technical consulting for Infrastructure Projects with over 40 years of experience and expertise in multi-disciplinary / technology planning and engineering services. The company was established in 1966 and now has a comprises of talented engineers, natural scientists and economic experts from over 30 disciplines, combined with the state-of-art-tools and technologies, in the same tradition of those pioneers. With Project experience in over 35 countries, Tracetebel Engie GmbH formerly called as Lahmeyer International has a work force of over 1,000 professionals and an annual turnover of more than EUR 100 million.

The company offers a wide spectrum of independent technical and economic planning and consulting services in the sectors of energy, hydropower and water resources. The focus is value engineering and economic efficiency, with the highest priority being given to environmental compatibility, social accept-ability and conservation of resources.

In the wind sector, the key references are; country wide wind mapping of 13 countries, wind potential evaluation of 405 farms, feasibility studies of 150 wind farms (5,540 MW), due diligence of 745 farms (18,800 MW), construction supervision of 75 farms (1,920 MW) and O&M supervision of 90 farms (2,500 MW).

Renewable Resources and Tractebel Engie GmbH, Germany has a exclusive collaboration in Wind , Thermal, Grids and Interconnections for projects in Pakistan.

-

Meet The Team!

Dr. Irfan Afzal Mirza,

CEO:

Mr. Mirza has more than 25 years of work experience and is the pioneer of the MW class wind energy program in Pakistan. He served as a core team member in laying the foundation of Alternative Energy Development Board (AEDB), the apex of the Government of Pakistan; a body governing renewable energy projects in the country.



Upon submission of his research on 'Wind Data Reliability for Wind Power in Pakistan', he successfully completed his PhD in 2013 from University of Engineering and Technology Taxila, Pakistan. He has been the key architect of first renewable energy power policy of Pakistan and made valuable contributions in developing the first Energy Purchase Agreement for wind power in Pakistan by changing the demand driven concept to supply driven concept. He also initiated the requirement of changing the grid codes for wind energy in Pakistan and has the honor of giving the first presentation to the authorities. He has many research publications published in international journals like the ELSEVIER Journal of

Renewable Energy. He is actively involved in World Wind Energy Association (WWEA) to promote wind energy in the world. He participated as speaker in many international conferences including as one the speakers from Asia in WWEA International Conference in Husum, Germany in 2010.

He remained involved in the inception activities of International Renewable Energy Agency (IRENA) at the inception conference at Germany.

As CEO/Director of RE2, he is leading and managing the overall vision of the company and providing strategic direction to achieve company's ultimate goals.

M. Ammad Riaz,

CTO:

Mr. Riaz brings skills including engineering management, system design & development, project planning & management, market & business analysis backed by more than 20 years of experience.



He has remained deeply involved in putting up the wind industry of Pakistan to its current stage due to active participation in implementation of almost all projects. He has been the pioneer in implementation of off grid solar energy applications in Pakistan. He has also been a part of the team making vital contributions in the bio diesel and fuel ethanol programs in Pakistan.

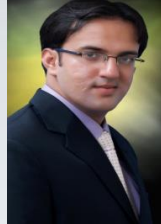
As CTO/Director of RE2, he is looking after the technical and technological side of execution of projects and new sector development.

The Doers

Salman Nazir,

Head of Projects:

Mr. Nazir is a Mechanical engineer with experience of more than 15 years in the field of RE.



His contributions to the company include expertise in simulation software (such as WAsP, WinPro, Windographer, Homer, Google Professional Tools and integrated use of different software etc.) and in making technical feasibilities. This makes him one of the very few in the country to have capabilities of assessing the potential of an RE project at any site.

Mr. Nazir has vast knowledge of Solar PV system design and installation including off grid, hybrid and grid connected systems.

Mr. Nazir is also an expert of site identification, access studies, supply chain strategies, logistics plans etc.

He has a proven track record of successfully managing construction projects from start to finish, ensuring that they are completed on time, within budget, and to the highest standards of quality. He is skilled in all aspects of construction and project management, including project planning, budgeting, scheduling, and risk management. With his extensive experience and knowledge, he is able to effectively lead teams and manage complex projects. He is known for his strong leadership skills, excellent communication abilities and problem-solving abilities

Code of Conduct

Ethics Charter

Integrity is one of the core values at Renewable Resources Pvt. Ltd (RE2). This Charter defines RE2's Objectives in this area and the corresponding Rules of good conduct.

Our Objectives

- To continue striving to provide the timely quality services to our clients and offer opportunities for success to all our clients, partners and subcontractors in a spirit of fair competition and mutually rewarding collaboration.
- To conduct business everywhere in the world with the highest standards of honesty, integrity and fairness.
- To put our staff as at the heart of our strategic development, and create conditions for the individual employees of RE2 to reach their full potential.

Our Rules of Good Conduct

In carrying out their professional activities, the employees of RE2 must thrive throughout Pakistan and the rest of the world to comply with the following rules of good conduct:

- Respecting the spirit and the letter of applicable laws.
- Not granting, directly or indirectly any kind of benefit to any person involved with RE2 business for the purposes of obtaining commercial favors.
- Avoiding conflict of interest between their roles in the Firm's business and their private interests particularly in their relations with clients, competitors and subcontractors. In this regard, RE2 staff must refrain from offering or accepting gifts or invitations which would not be consistent with acceptable practices or applicable laws. They must also refrain from investing or acquiring interests with clients or competitors without the prior written consent of management.
- Protecting the confidentiality of the information to which they have access through their professional activities.
- Informing the Firm's Administration about any behavior which is not compliant with the rules set forth in this Charter.



1002, 10th Floor, Green Tower
Jinnah Avenue, Blue Area,
Islamabad, Pakistan.
Ph: +92 51 8358591
+92 51 8734901-02
Fax: +92 51 8358592

www.renewableresources.com.pk
info@renewableresources.com.pk