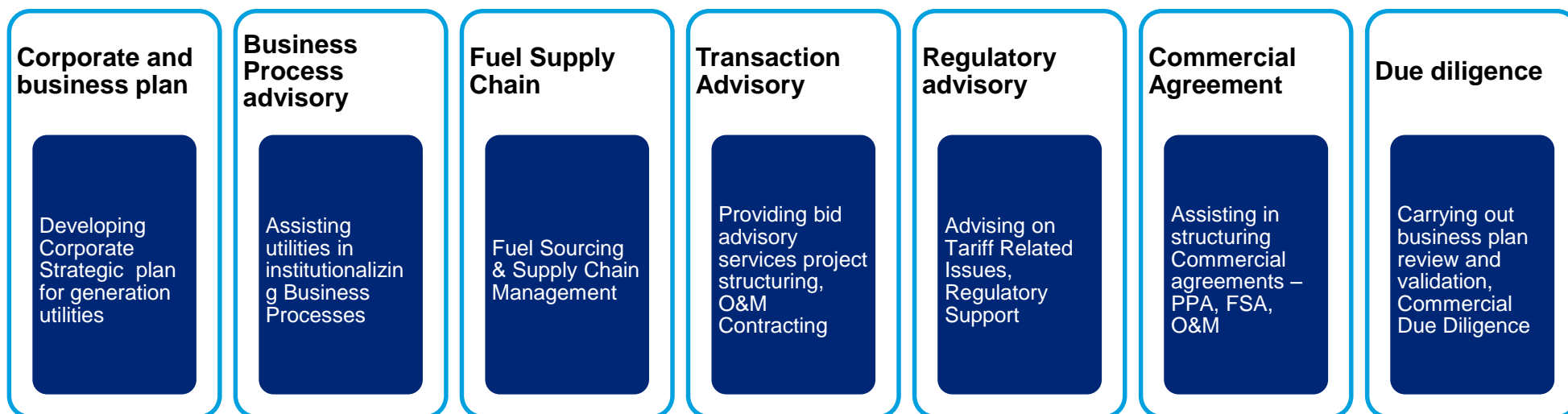


Deloitte.

Utilities



Power Generation – our service offerings



We have worked with:

- Generation Utility – Central and State Public Sector
- IPP
- Overseas Players in Nigeria, Bangladesh, Nepal
- Financial Institutions
- Development Banks

National Thermal Power Corporation	Mahagenco	NWPGCL Bangladesh	Lanco	National Power
National Hydel Power Corporation	West Bengal Power Development Corporation	Amperion Nigeria	Jindal Power Limited	Nuclear Power Corporation Ltd
Ceylon Electricity Board, Sri Lanka	Global PE Firms – Khazanah, Actis, etc	Sterlite Technologies Ltd	Power Finance Corporation	OPG
Damodar Valley Corporation	JSW Energy	Nepal Electricity Authority	Indiabulls Power Ltd	HNG
Ratnagiri Gas Power Plant Ltd	Tata Power	GMR	CESC	

Power Generation – our select credentials

- Review of Subsidiaries & JVs of NTPC
- Transaction Advisory & Business Process Implementation for 414 MW Gas Based Project in Nigeria
- Management Consultancy Services for Institutional Capacity Building NWPGL Bangladesh
- Bid Advisory for 4000 MW UMPP Odisha for Jindal Power Limited
- Preparation of Corporate Plan 2012-2022 with perspective Plan up to 2027 of Damodar Valley Corporation
- Preparation of Long Term Corporate Plan 2012-2032 for Power Finance Corporation
- JSW Energy for preparation of financial model for the power generation and coal mining business in Botswana, Africa
- Preparation of captive Power Policy for HNG

Our team credentials

World Bank O&M Audit of Thermal Power Stations Koradi & Bandel 210 MW

Corporate Model for Bheramara Combined Cycle Power Plant 360 MW

DFID Best Practices Documentation for Thermal Power Plant

Siddhirganj O&M Transaction Advisory OCGT Project 540 MW for Government of Bangladesh

Financial feasibility analysis of Captive Power Plant for Kenya Refineries

Operational readiness for a 2 x 520 MW Thermal Power Plant

Project Development Assistance for EPC and O&M Contracting for a 2500 MW CCGT Project HEPGCL

IFC Accounting Due Diligence and Development of Private Sector Power Generation Policy for Yemen

World Bank Transaction Models for Mainstreaming PPP in R&M

GERC Fuel Audit of GESCL and Torrent Power

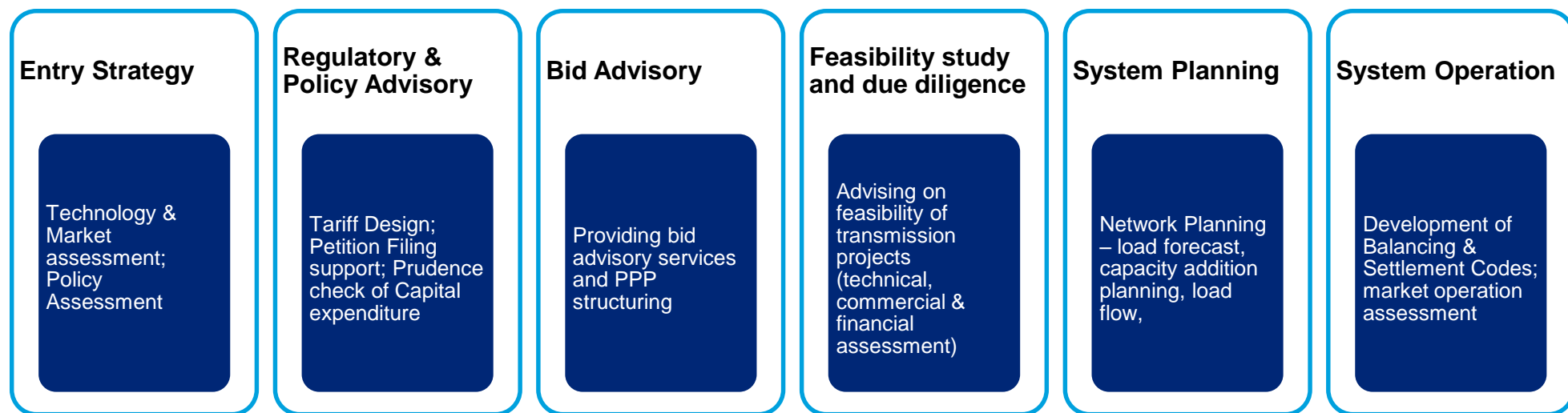
Power Sector Strategy Formulation for Tata Steel

Financial Management Strengthening for WBPDC

Impairment Analysis for New Build Supercritical Coal Fired Plants

O&M Contractor Selection for 2 x 125 MW Lignite Power Plant GMDC

Transmission and System Operation– our service offerings



We have worked with:

- Government Ministries
- State Transmission Utility
- Central Transmission Utility
- Load Dispatch Centre
- Private developers
- Regulators
- Development Banks

Energy Department, Govt of Karnataka	Asian Development Bank	Jaigad Power Transco	Electricity Dept, Pondicherry
Damodar Valley Corporation	Andhra Pradesh Electricity Regulatory Commission	EPC players in transmission	World Bank
Prominent Steel Company's Power subsidiary	PGCIL	Maharashtra State Power Committee	

Transmission & System Operation – our select credentials

- Preparation of pre-feasibility studies for a 400 kV line and sub-station project in Karnataka
- Evaluation of existing balancing & settlement mechanism in Andhra Pradesh and work towards developing new regulations
- Network due diligence for Ceylon Electricity Board's transmission network
- Maharashtra Solar Park and Green Grid Development Investment Program
- Support to EPC players in IPTC bids
- Transmission entry strategy for a prominent power company

Our team credentials

Multi Year Tariff filing support to Jaigad Power Transco

ARR filing and open access cost determination petition for Electricity Department Pondicherry

Review of Balancing & Settlement Code for Maharashtra State Power Committee

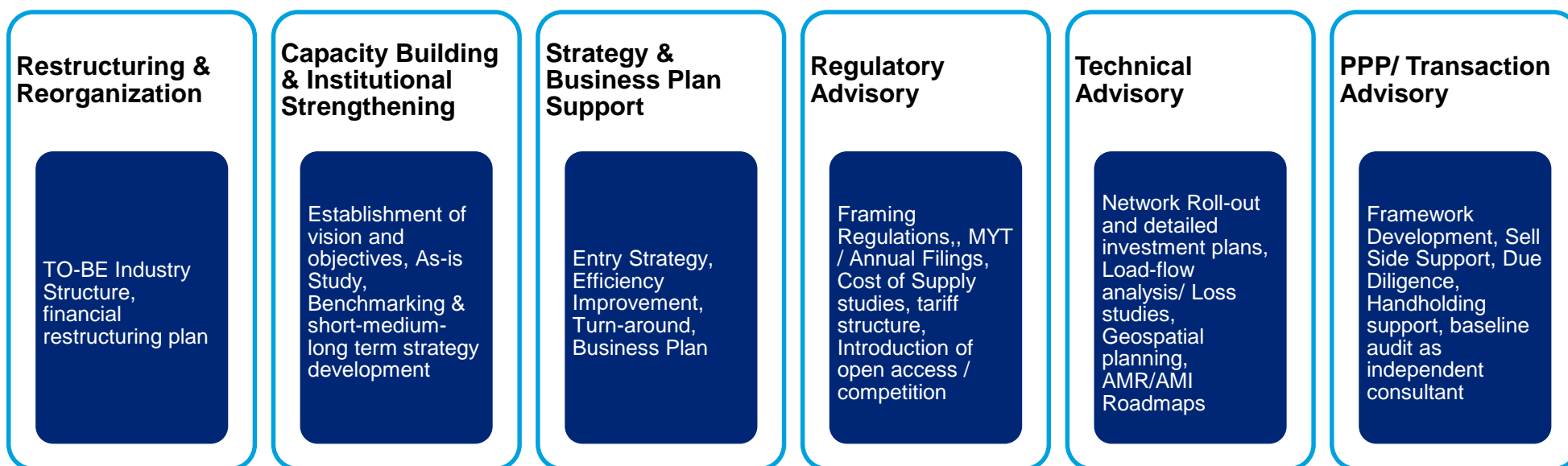
Review of CERC's proposed terms and conditions of tariff and benchmarking exercise on various parameters for PGCIL

Process review and redesign for the Transmission function of DVC

Review of evacuation strategy for a coastal located thermal power plant and assessment of new transmission pricing mechanism

Preparation of Annual budget for MSLDC

Power Distribution – our service offerings



We have worked with:

- Distribution Utility – Central and State Public Sector
- Private Players
- Distribution Franchisees
- Overseas Players in Nigeria, Nepal, Sri Lanka, Bangladesh
- Financial Institutions
- Development Banks

The World Bank	Asian Development Bank	International Finance Corporation	Forum of Regulators
CERC	Zimbabwe Electricity Transmission and Distribution Company, Zimbabwe	Ceylon Electricity Board, Sri Lanka	Jindal Power Limited
Nepal Electricity Authority	State Governments – Karnataka, UP, Uttarakhand, MP, WB, Rajasthan etc.	State Utilities – Maharashtra, Jharkhand, Bihar, Haryana, WB, Tripura, Kerala	Regulatory Commissions – Himachal Pradesh, Bihar, Chhattisgarh, Maharashtra
DPSC	Indiabulls	REC	GMR

Power Distribution – our select credentials

- Strategy Formulation of Jamshedpur circle prior to taking over of Tata Power Distribution Franchisee
- Restructuring of Bihar State Electricity Board (BSEB)
- Consultancy support to Tata Power Company on bid management (Assistance in procurement of power through Case-1 competitive bidding route) for Distribution Business
- Capacity Building & Institutional Strengthening of JSEB
- Consultancy support to World Bank on restructuring, corporatization and privatisation of distribution services of Karnataka State Electricity Board
- Re-engineering of financial processes / practices to improve efficiency of Uttaranchal Power Corporation Ltd.(UPCL)
- Assistance in finalization of PPA for power procurement from Kariba and Hwange Project in Zimbabwe

Our team credentials

North Eastern Regional Power Sector Improvement Project for World Bank for Nagaland, Mizoram and Tripura State

Conducting impact study of agriculture HVDS scheme implemented Haryana

Distribution Business Entry Strategy to JSPL

Consultancy support to AERC on fuel and power purchase price adjustment, Review of regulation and formation of regulation

Accounting assistance to the Electricity Department of Puducherry for FY 13-14

MYT / Annual tariff filing and Business Plan for multiple utilities like CSPDCL, JSEB, BSEB, CED, MSEDCL, WBPDC, TSECL

Diagnostic Review of India Power and directions for the future – World Bank Study

Consultancy support to JSEB on conducting cost of service study

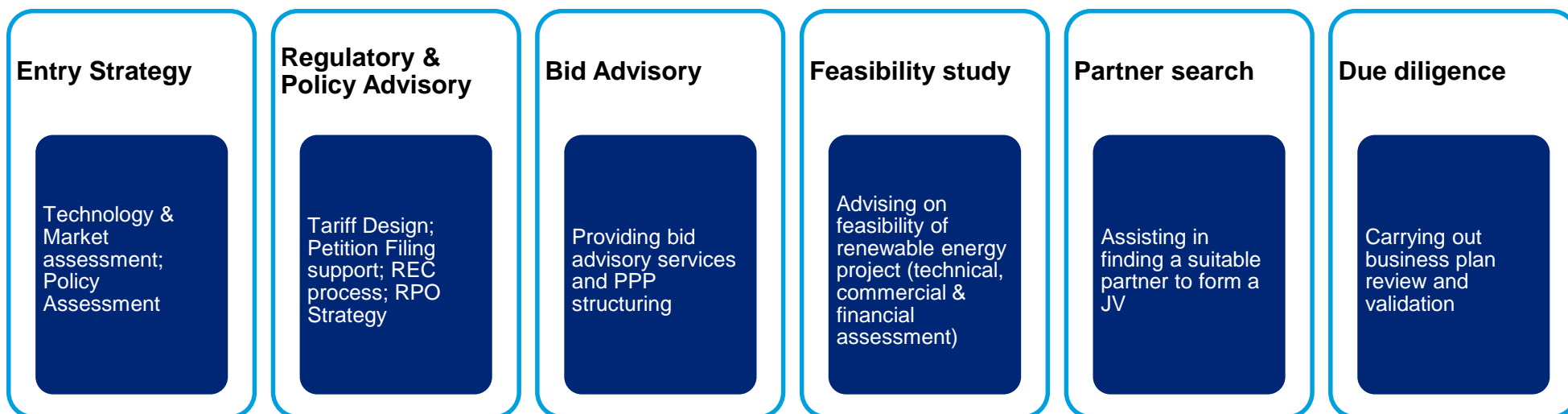
Evaluation of Madhya Pradesh Power Sector reform for DFID

Consultancy support to BSPHCL / erstwhile BSEB in preparation of business plan and MYT filings with BERG for the first control period 2013-14 to 2015-16) and Voltage-wise Cost Supply study

NEA Institutional Strengthening (Finance & Accounts Strengthening) - Nepal

Project Management Consultant (IT Consultant) for assisting MSEDCL in ERP Implementation & Integration

Renewable Energy – our service offerings



We have worked with:

- Government Ministries
- State Nodal Agencies for Renewable Energy
- Private developers
- Financial Institutions
- Development Banks

The World Bank	Asian Development Bank	International Finance Corporation	KfW
Ministry for New & Renewable Energy	Forum of Regulators	Gujarat Energy Development Agency (GEDA)	Uttarakhand Renewable Energy Development Agency (UREDA)
Indian Renewable Energy Development Agency Ltd.	Jakson Engineers Ltd.	Electrotherm India Limited	Large Cement Manufacturer
A Large Wind Turbine Manufacturer	South India based PV Manufacturer	Large independent Renewable Power Producer	JAPAN External Trade Organization (JETRO)

Renewable Energy – our select credentials

- Preparation of Net-metering Regulations for solar rooftop projects in India
- Transaction Advisory services - Support to IFC/ Government of Gujarat in implementation of rooftop solar PPP project in Gandhinagar
- Strategic Plan for setting up National Solar Energy Technology Centre (NSETC)
- Study of cost structure for Decentralized Distributed Generation Sector in India and Nepal
- Review of National Solar Mission Phase I: Key Experiences and Lessons Learnt
- Selection of private partner for setting up of the Grid Interactive Solar Power Plant at Shirsuphal, Maharashtra under KFW funding

Our team credentials

Support to IFC/ Government of Gujarat in replication of rooftop solar PPP project in five cities

Support to IFC/ Government of Odisha in rooftop solar PPP project in two cities (Bhubaneswar & Cuttack)

White Paper on Solar Distributed/Rooftop Project through PPP and Gujarat Rooftop Solar Power Policy

Business Plan and Valuation Support for solar manufacturing

Market assessment for solar manufacturing in India

Financial Appraisal of Solar Power Plant

Renewable Energy Strategy and REC market profiling for all the cement units in India

Assistance in policy and regulatory matters related to establishment of wind park and regulatory issues related to the Electricity Act 2003.

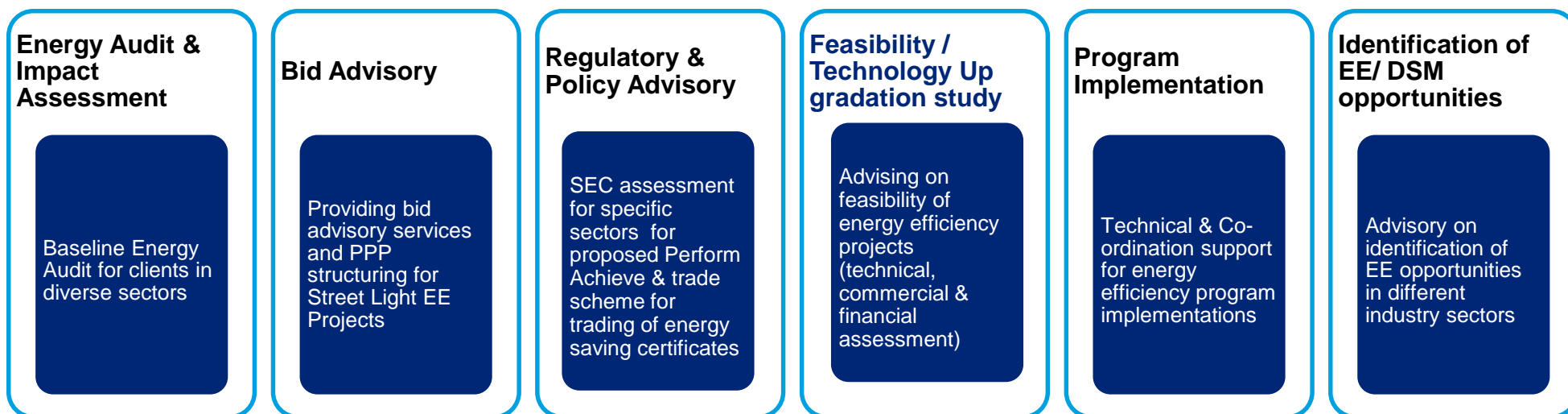
Wind Sector Market Assessment

Go to Market Study for Micro Renewables

Review of operation performance of Biomass project, feasibility study for setting up biomass projects

Solar Irrigation water pumping in 3 States in India – feasibility study

Energy Efficiency– our service offerings



We have worked with:

- Government Ministries
- Central & State Sector Players
- Private Players
- Financial Institutions
- Development Banks

Asian Development Bank	International Finance Corporation	World Bank	Bureau of Energy Efficiency
ONGC	IKEA	Climate Works Foundation	Shakti Sustainable Energy Foundation
Bharti Hexacom Limited	Bharti Airtel	TATA Teleservices (Maharashtra) Limited	German Technical Cooperation (GTZ)
Greater Hyderabad Municipal Corporation	Global Automobile Manufacturing Industry	Large Industry / Manufacturing Players	

Energy Efficiency – our select credentials

- Green Power Development and Energy Efficiency Improvement Investment Program
- Investment grade energy audits for tea factories in Sri Lanka
- Technical and coordination support to the BEE to implement Super-Efficient Equipment Programme
- Bhubaneswar Street lighting – Technical Consultants for IFC
- Developing baseline specific energy consumption (SEC) for petrochemicals sub-sector
- Energy Allocation & Energy Effectiveness Assessment / Performance Matrices for Pan India Data Centers Owned by Bharti Airtel
- Baseline Development & EE/DSM impact Evaluation for Leading Telecom Service Provider
- Assistance to German Technical Cooperation (GTZ) and BEE to develop PDD for EE project at Gubbi

Our team credentials

Support to IFC for Implementation of ESCO based Street Light Energy Efficiency project for Bhubaneswar Municipal Corporation (BMC)

Consultancy Services to GHMC to review the proposal for Implementation of Street Lighting Energy Efficiency and Automation Project through Performance Contract Route (ESCO)

Investment Grade Energy Audits & Energy efficiency Improvement advisory services for various industry sectors

Development of Baseline Consumption Profiles & Impact Assessment, Evaluation of Energy Efficiency / DSM initiatives for Telecom Tower Industry

Technical and coordination support to the BEE to implement Super-Efficient Equipment Program

Energy Allocation & Assessment of Energy Effectiveness / Performance Matrices for Pan India Telecom Data Centers Owned by Bharti Airtel

Renewable energy integration feasibility analysis for tea industry

Technical Advisory to BEE towards identifying energy efficiency measures in paper and tile cluster

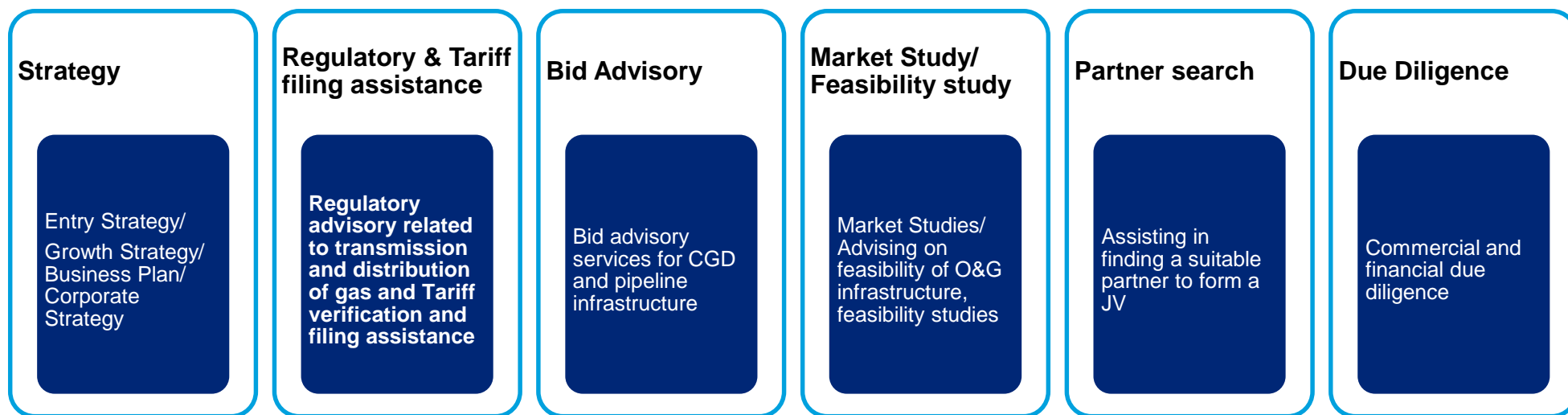
Energy Auditing Services for “Suppliers Go Renewable” initiative to IKEA

Developing baseline specific energy consumption (SEC) for petrochemicals sub-sector for inclusion in PAT scheme w.r.t trading of ESCerts.

Technology up gradation and Energy Efficiency Improvement project in steel Forging SME cluster

Technology up gradation and energy efficiency improvement project in steel forging SME cluster at Mandi Gobindgarh

Oil & Gas – our service offerings



We have worked with:

- Regulator
- National Oil Companies
- Private players
- Financial Institutions
- Equipment Manufacturers

PNGRB	GAIL (India) Ltd.	ONGC and its subsidiaries	HPCL/ IOCL
CUGL/ BGL	Dresser Inc.	Shell (Hazira)	Punj Loyd
Jubilant (Infrastructure) Ltd.	Petronet LNG Limited	Fertilizer Association of India	Suzlon Infrastructure Ltd.
RGPPL	Haldia Petrochemical	Vopak International	DGH

Oil & Gas – our select credentials

- To evaluate the offer for purchase of 5% equity interest in the truncated physical assets of LNG company in Middle East
- Advisory for sourcing and pricing of natural gas from Domestic and import sources along with estimation of landed price
- Bid advisory for CGD and transmission pipelines
- Natural Gas and LNG Market Study in European and Asian Markets
- Study of Regulatory Environment for gas distribution in India for Fertilizer Association of India

Our team credentials

Market entry strategy for Indian Natural Gas and LNG market

Assistance in Reviewing and Revising the submission of Financial and Other Data to PNGRB

Project appraisal for its Surat - Paradeep Natural Gas Pipeline

Verification of network tariff for CGD network charges for Vijayawada and Hyderabad cities

Development of Business Plan of RGPPL including market study for r-LNG/ Gas in India

Corporate Plan for the JV of ONGC including possibility of gas allocation for further expansion

Entry/ Expansion strategy US based Gas industry Equipment Manufacturer

Evaluated the structuring options of GAIL's petrochemicals business

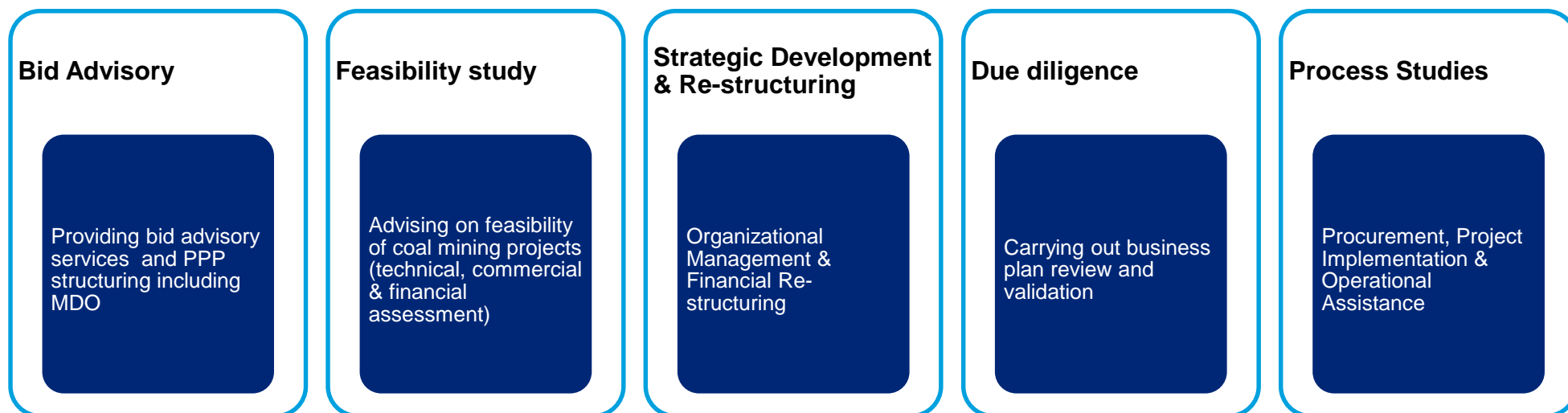
Understanding of Gas market and possible of entry in City Gas Distribution Sector in India

Transaction Advisory for overseas asset acquisition

Market Assessment of Oil & Gas sector equipment's in Bangladesh

Assistance to ITA for Demand Supply Scenario of Gas in NER and representation for allocation of gas

Coal Mining – our service offerings



We have worked with:

- Government Ministries
- Central & State Sector Developers
- Private Developers
- Thermal Power Generators
- Financial Institutions

Ministry of Coal	Coal India Ltd	NTPC	Damodar Valley Corporation
Tata Power	Sterlite Industries	Indu Projects	EMTA
L&T Power	Uttar Pradesh Power Corporation Limited	Rajasthan Rajya Vidyut Prasaran Nigam Limited	Power Finance Corporation

Coal Mining – our select credentials

- Restructuring of Coal India Limited
- Assistance in UMPP Bid Management for 4000 MW Odisha UMPP
- Finalizing Pricing of Captive Coal Blocks of DVC under JV agreement with EMTA
- Techno-Economic Feasibility for KTK Longwall Project
- MDO Bid Advisory Services to DVC
- Analysis of Coal Supply Agreements and Establishing a Benchmarked Base Price for GMR energy in Indonesia
- Assistance in Bid Advisory for section of coal washing and transport alliance partner for Nabha Power

Our team credentials

Review Consultancy Service Package for selection of Developer for 4000 MW Tilaiya UMPP to PFC

Financial Appraisal of Kerendhari Coal Mining Project of NTPC

Bid advisory to UPPCL for Procurement of 6000 MW power on a long term basis under Case-1 framework

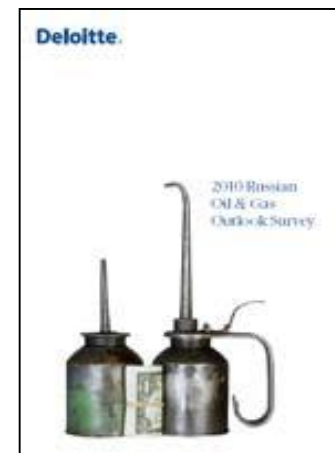
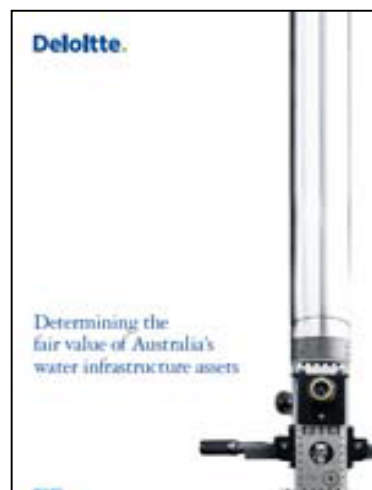
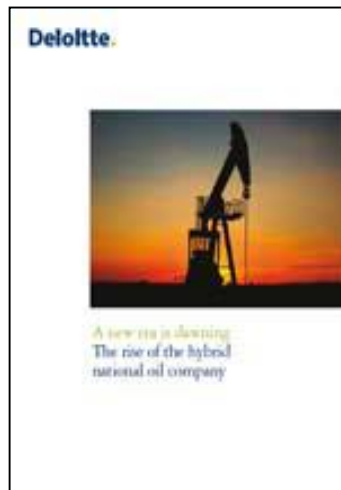
Assistance in UMPP Bid Management for 4000 MW Sasan UMPP

Assistance in UMPP Bid Management for 4000 MW Krishnapatnam UMPP .

Bid advisory to RRVPNL for Procurement of 1000 MW power on a long term basis under Case-1 framework

Our select thought leadership

From an array of thought-provoking reference materials to up-to-the-minute releases on the most recent developments, Deloitte shares its intellectual capital with its clients. Some examples are listed below



Deloitte.