Can Procurement Renew Investor Confidence in the Power of Renewable Energy and Spur Economic Development?

Context

Electric power supply and demand had been mismatched in South Africa for several decades when the postapartheid government introduced formal planning in the energy sector and required significant renewables in the power generation mix. Electricity planning (formally named the Integrated Resource Plan) was moved from a state-owned public utility with a monopoly on power generation, Askom, to the Department of Energy. Whereas new energy policies broached private-sector participation in renewable energy (a 1998 agreement called for 70:30 public-private power generation) and modest renewable energy targets for 2003–13, implementation floundered. Policy and regulatory frameworks were untimely; procurement programs designed by Askom were mostly unsuccessful; and targets were not clearly articulated.

Two events would unfold to change this course. First, research commissioned by the Department of Environment Affairs on long-term mitigation strategies for climate change provided the basis for South Africa’s president to pledge a 34 percent carbon dioxide reduction below “business as usual” by 2020 in exchange for international financial aid and technology transfers, galvanizing private sector participation in renewables and aiming for 300,000 new “green economy” jobs. The research also informed the Integrated Resource Plan 2010–30—including a first-time cap for electricity emissions, which constitute nearly half of the country’s carbon emissions. Second, a legal opinion commissioned by the Department of Energy and the National Treasury found the renewable energy feed-in tariffs devised by Askom “amounted to non-competitive procurement and therefore were prohibited by public finance and procurement regulations” (Eberhard, Kolker, and Leigland 2014, 7).

The government had come full circle without a viable plan to attract private investment, which was needed to help meet the electricity demands of a fast-growing economy and to build a native green industry.

Development Challenge

The challenge for South Africa was to develop a transparent process to procure renewable energy projects quickly and efficiently at competitive prices to meet the electricity demands of a fast-growing economy and to produce equitable and environmentally sustainable growth.

Intervention

In 2011, South Africa’s Department of Energy established the Renewable Energy Independent Power Producers Procurement Program (REIPPPP) to expand power system capacities. The program aimed to better balance economic
growth and development, energy access and security, and environmental sustainability; to attract private sector participation in renewable power generation; and to create economic development in rural areas. Learning from and building on a failed first-generation renewable energy generation program, the Department of Energy retained the program's financiers, many of its contractual templates, and its goal of a large-scale renewable energy project with private developers but revamped the transaction structure.

The REIPPPP structure to determine the costs of producing renewable energy—including solar, wind, hydro, biomass, and photovoltaic—departs from widely used government analysis for long-term supply contracts (feed-in tariffs). Especially in emerging economies, competitive bidding can lower prices and entice renewable energy suppliers into the market. The Department of Energy cultivated allies in the government and consulted widely in the private sector; it tiered tenders to make midstream corrections, to facilitate competition, and to reduce prices; and it benefited from the country’s unsurpassed solar radiation, from strong government ownership, and from oversupply in the international renewable energy sector. In less than three years, the private sector garnered 64 projects, attracting $US14 billion of private sector investment. Competition in the first three rounds of bidding (2011–13) made energy prices competitive while unprecedented implementation speeds are facilitating work on first projects and impacting rural economies.

### Delivery Challenges

This delivery note analyzes key implementation challenges and examines how they were overcome.

- **Energy and electricity supply.** The state-owned public utility Askom held a monopoly position in the electricity sector for years. It generated 96 percent of South Africa’s electricity, owned and controlled the national high-voltage transmission grid, and distributed approximately 60 percent of electricity directly to customers. Askom was viewed with circumspection because of its procurement and licensing processes and its commitment to uphold power purchase and interconnection agreements. When Askom’s Renewable Energy Feed-in Tariff (REFIT) program collapsed, the Department of Energy took charge of the government’s electricity program but lacked the capacity for a sophisticated, multiproject, multibillion-dollar international bidding process for renewable energy.

- **Corruption and patronage.** Uncertainty spread over the market after the REFIT program closure. A 2011 survey by Transparency International found that “more than half of all those who come in contact with public service providers (56 percent) were asked to pay a bribe in the past year,” (Transparency International Secretariat 2011) and that 62 percent thought corruption had worsened over the previous three years (2009–11). There were also persistent allegations that engineering, procurement, and construction contractors gamed the system requirements for local sourcing, with high bid scores likely resulting from parent companies selling materials to local subsidiaries at below-market prices and counting the markup as local content value added.

### Addressing Delivery Challenges

The following steps were undertaken to mitigate the delivery challenges related to **energy and electricity supply:**

- For the first six months of 2011, the Department of Energy held informal consultations with developers, lawyers, and financial institutions. The consultations proved invaluable not only for receiving private sector feedback on design, legal, and technology issues but also for allaying market concerns over the REFIT program’s collapse. Engaging stakeholders early in the process smoothed implementation and produced effective outcomes.

- Further, the Department of Energy and the National Treasury’s Public-Private Partnership Unit formed a small, tight-knit office of technical experts. The Department of Energy and Independent Power Producers (DOE–IPP) Unit operates outside formal government structures. A senior National Treasury manager who developed the public-private partnership framework and long promoted IPPs with the Department of Energy leads the program and is its best champion. The team upholds consistently high bidding standards, with tight security and transparent procedures; it generates extensive, high-quality, accessible electronic documents; and it adheres to program deadlines. The team also facilitates widespread use of private sector advisers and a business-friendly approach. Known for closing public-private partnership contracts and for solving problems and facilitating (not regulating) work, the DOE–IPP Unit is well regarded in the private and public sectors.
The following steps were undertaken to mitigate the delivery challenges related to *corruption and patronage*:

- The DoE–IPP Unit’s decision to seek exemption for Askom from the government’s rigorous PPP regulations was pivotal, with investors and operators taking note of the program’s market-ready expediency. The unit had experience in making private sector deals and included triggers to control bidder behavior and to restrict entry points for gaming and slowing (through negotiations) the system. These include nonnegotiable power purchase and interconnection agreements, standardized financial data requirements for evaluation models, bids fully underwritten with debt and equity, and a 70:30 split for economic development. Last, the National Treasury reviews transactions and issues sovereign guarantees, which international banks and investors, given the country’s credit standings, accept without political risk insurance. The design of internal controls for market entry was critical.

- The bidding process was tiered to maximize competition and to minimize security concerns. The Department of Energy’s wide consultation process indirectly, and importantly, served to convey a sense of professionalism and competency and to ease market jitters over the government’s ability to field private investment for renewable energy generation. There was another key alteration to the bidding process: changing from a one-off tender to rounds of rolling bids. The rounds helped build confidence among investors and operators about entering the arena; caps for pricing and for total procured capacity per technology type limited supply and raised the level of competition. Site identification and early development costs were the bidder’s responsibility, as was submission of bids within three months of the request for proposals. Bids reviews have two steps: meeting minimum thresholds in six areas and then submitting both fully and partially indexed prices for inflation on a 70:30 split for pricing and economic development. Caps and floors were added as the process evolved. Importantly, because of “the scale of investments, the competition anticipated, and the reputational risk identified, security and confidentiality surrounding the evaluation process [were] extremely tight with 24-hour voice and CCTV monitoring of the venue” (Eberhard, Kolker, and Leigland 2014, 12).

**References**
