Electricity Theft and Non-Technical Losses: Global Markets, Solutions, and Vendors

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Electricity Theft and Non-Technical Losses:
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Globally, utilities lose $96 billion per year to non-technical losses – typically electricity theft, fraud, billing errors, and other lost revenue. The effect of these losses can be crippling, driving up electricity prices for paying customers, starving utilities of the resources for future capital investment, and in many cases creating financially unsustainable utilities or draining governments of subsidies that could be used to modernize the country's infrastructure. Until recently, there were few effective solutions for this problem. Labor-intensive premise inspections and account auditing often costs more than the actual value of the losses, enforcement is always challenging, and previously AMI metering was prohibitively expensive in many countries. This is now changing, with AMI plans in the works across all regions of the world. Furthermore, sophisticated software and analytics can use real-time data from AMI meters and other grid infrastructure to pinpoint the source of non-technical losses. These solutions are spreading from developed countries where they are in many cases already well established to emerging market countries where the problem is significantly larger and critical to the fundamental health of many countries’ utilities. This will create a multi-billion dollar market, with companies from small software startups to the largest metering vendors and system integrators seeking to gain a piece of the market.

Key questions answered in this study:

- How much does each country across the world lose to non-technical losses in terms of dollars, percentage lost, and dollars lost per customer?
- What are the most cost-effective solutions for reducing non-technical losses?
- Who are the leading vendors and how are their solutions differentiated?
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