

# Contents



## Power

<b>Rethinking power:</b> IoT and AI for smart energy management systems ..... 6
<b>Views of R.K. Singh:</b> “India is way ahead on its energy transition journey” ..... 8
<b>Net zero future:</b> Need for a consumer-centric energy transition ..... 10
<b>Enabling transition:</b> Critical role of analytics and automation in evolving market design ..... 12
<b>Smart grid status:</b> NSGM progress and experience so far ..... 14
<b>Intelligent systems:</b> Use of smart grid technologies to deal with growing transmission complexity ..... 16
<b>MPPTCL:</b> Implementing new technologies to overcome challenges... 18
<b>Concerted efforts:</b> DHBVN’s initiatives to improve AT&C losses and billing efficiency ..... 20
<b>Growing convergence:</b> Role of IT and OT in power utilities ..... 22
<b>Securing the grid:</b> Taking steps to prevent cyberattacks ..... 24
<b>Smart metering update:</b> Sanctions and installations ..... 25

## Water & Waste

<b>Circular management:</b> Initiatives and best practices for reusing and recycling water resources ..... 26
<b>Digital intervention:</b> Delhi Jal Board’s initiatives to reduce water woes ..... 28

<b>Supply security:</b> Safeguarding water networks from cyberthreats ..... 30
<b>New high:</b> Lhasa Najin WTP setting global standards ..... 32
<b>Building resilience:</b> Smart and sustainable water management solutions for cities ..... 34
<b>Water kiosks:</b> Setting up ATMs to improve supply and accessibility ..... 36
<b>Smart city projects:</b> State-wise progress as of January 2022 ..... 38

## Gas

<b>Tech advancement:</b> Enterprise GIS facilitating organisations’ digital transformation ..... 40
<b>Network expansion:</b> GAIL’s recent initiatives in the CGD sector ..... 42
<b>Aerial intelligence:</b> Drone surveillance in the oil and gas industry ..... 44
<b>New exchange:</b> India’s first gas trading platform ..... 46
<b>Transducer technologies:</b> Measuring gas flows non-intrusively ..... 48
<b>Key statistics:</b> Natural gas prices; PNG and CNG infrastructure ..... 49