



# ***Ittron***

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**Technology, Media, & Telecommunication (TMT) Coverage Group**





The background of the image is a scenic view of Central Park in New York City. In the foreground, there is a body of water, likely the Pond, with trees and a path visible. In the background, several tall skyscrapers of the city skyline are visible under a clear blue sky. The image is used as a backdrop for a financial report overlay.

March, 2025

March 28, 2025 Close .....	\$103.87
Target Price .....	\$155.15
Upside .....	49.7%

Recommendation .....	<b><u>BUY</u></b>
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1	Statement Problem
2	Data center demand
3	Company Overview
4	Core business
5	Value Proposition

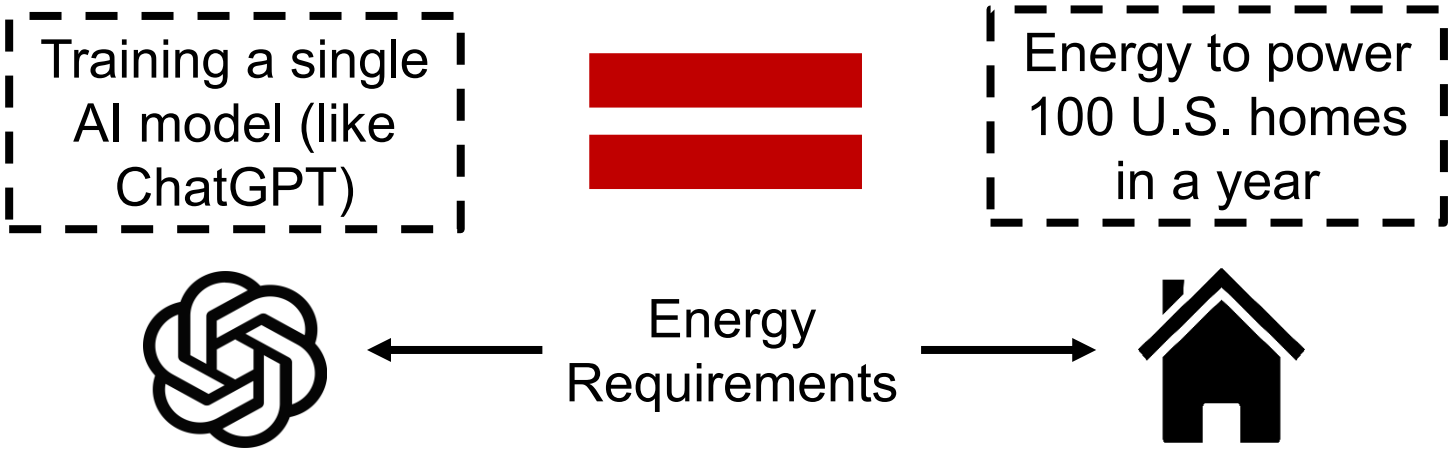
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Artificial Intelligence (AI) is revolutionizing industries, but it comes at a **massive energy cost**, especially for **data centers**, which are the backbone of AI operations.

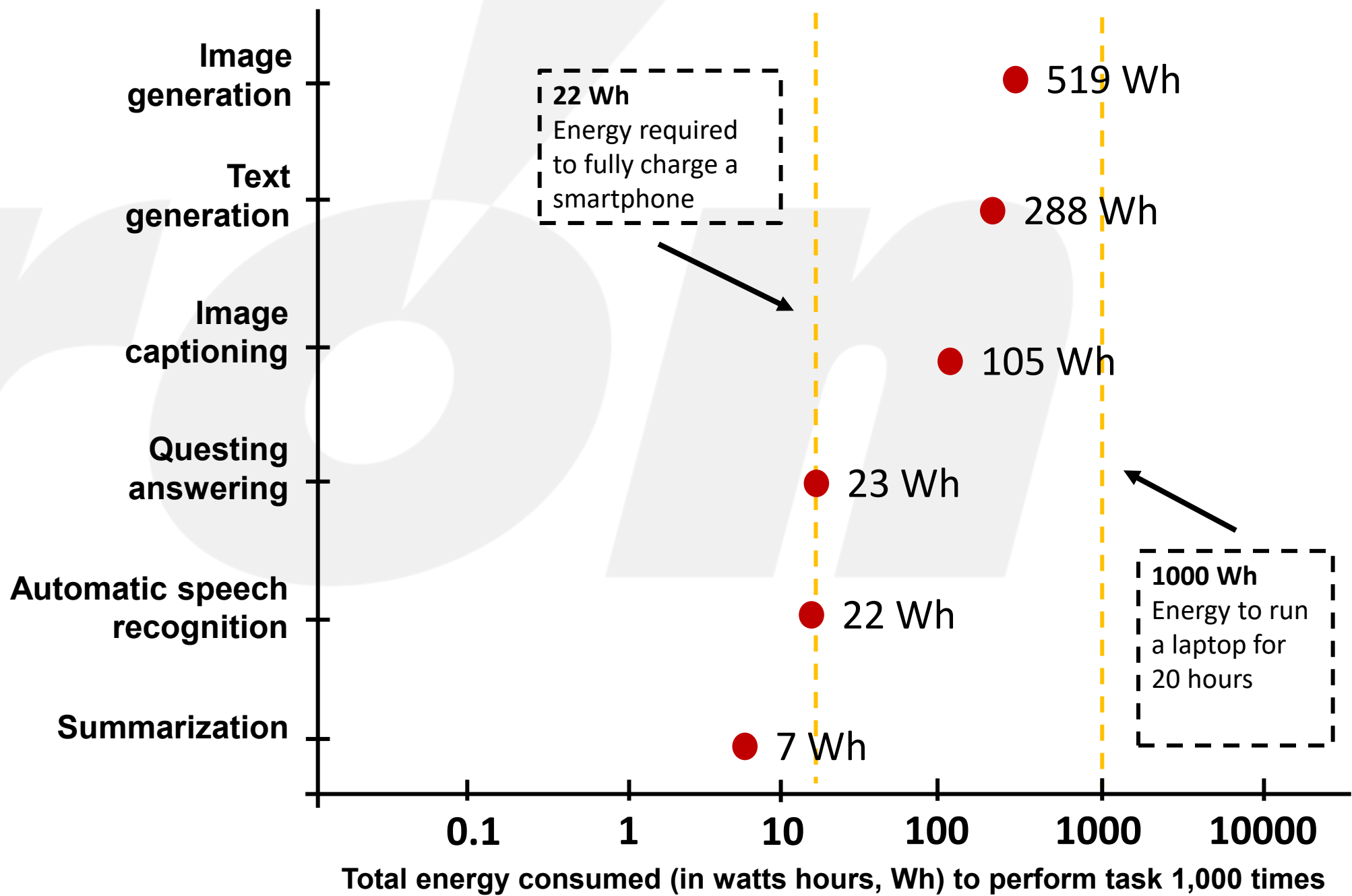
## Why Do AI-Powered Data Centers Need So Much Energy?

- AI models, especially large-scale machine learning (ML) models, require intense computational power to process vast amounts of data. This means:
  - Intensive Computation:** AI models, especially large-scale machine learning models, require significant computational power, leading to increased energy consumption.
  - Continuous Operation:** AI systems often run 24/7, further escalating energy usage.
  - Cooling Requirements:** High-performance AI hardware generates substantial heat, necessitating advanced cooling systems that consume additional energy.

## Did you know?



## How much energy does AI use?



# The Energy Grid Challenge for AI-Powered Data Centers



## Addressing the Growing Energy Demands of Artificial Intelligence

### Current Energy Grids Aren't Built for This Demand

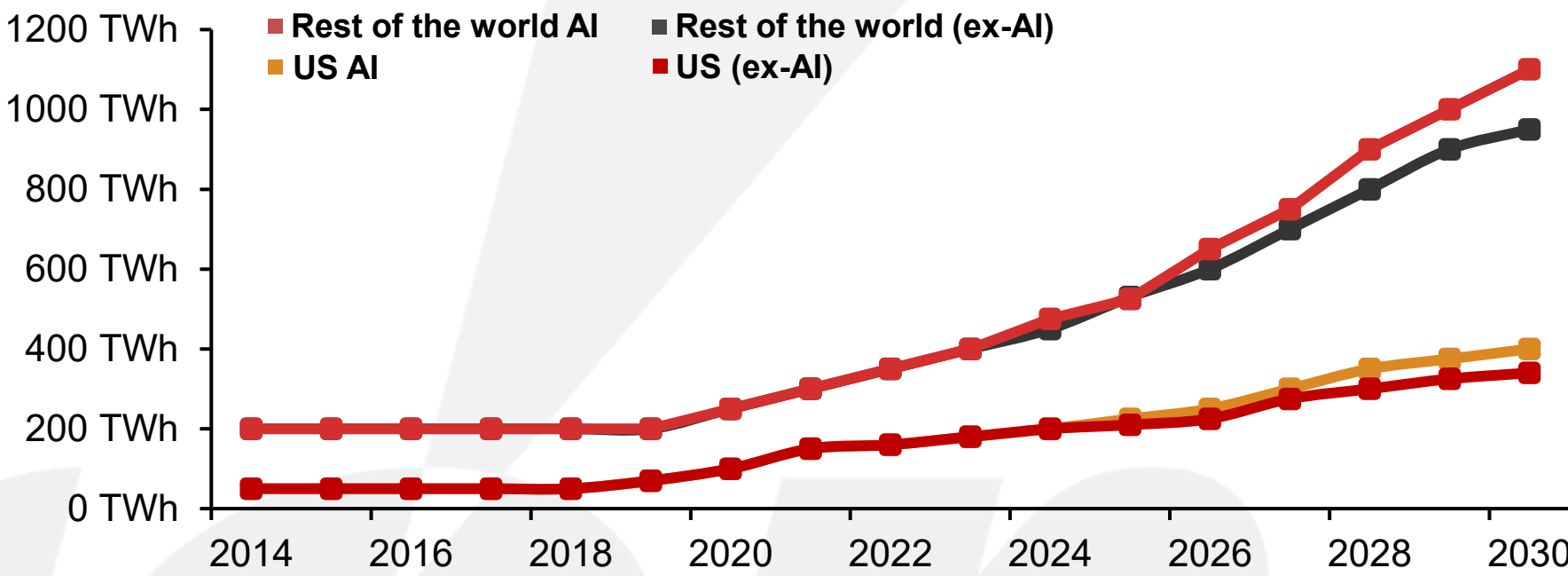
- By 2050, the grid capacity needs to grow by up to **400%** to keep up
- Data centers already use as much power as small cities, and AI demand is only increasing
- Utilities must upgrade grid infrastructure, but this requires huge investments and planning

### The Rising Demand for Energy

- The U.S. electric grid only grew by 60% from 2020 to 2022, but AI data centers will need far more capacity
- AI and cloud computing could **double electricity demand** in some regions by 2030
- Utilities must upgrade grid infrastructure, but this requires huge investments and planning
- Data centers use about **2%** of global electricity today, but this could quadruple within a decade

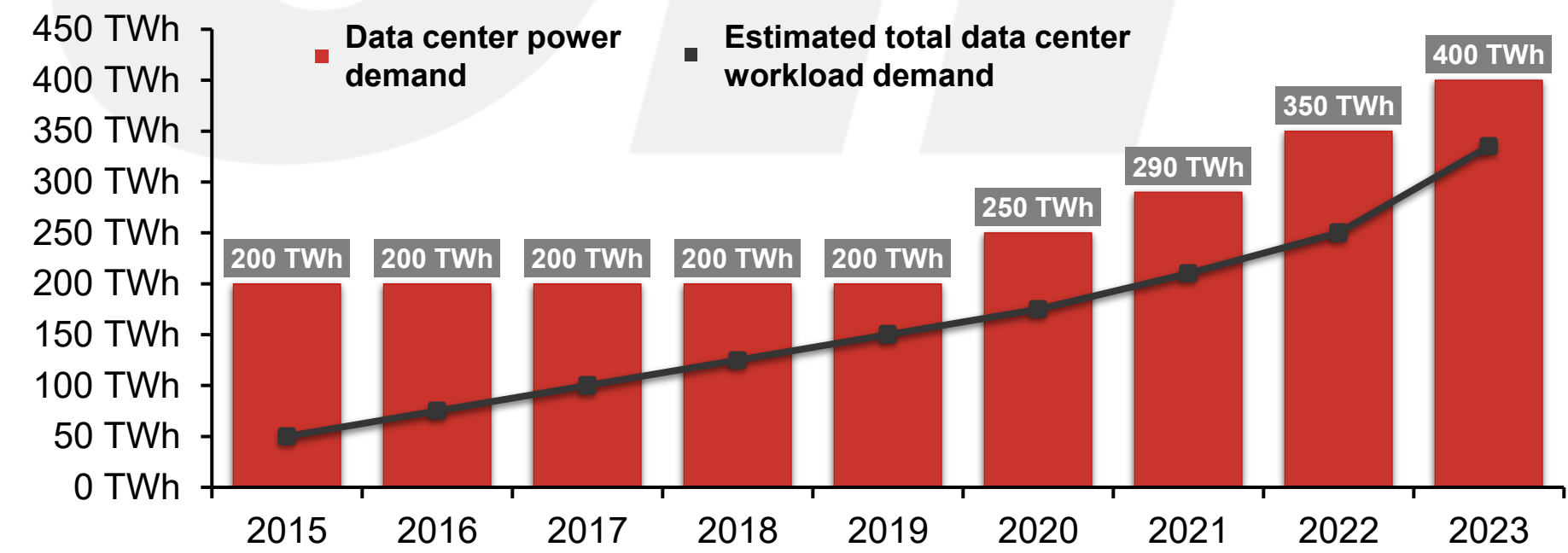
AI is reshaping the world, but energy infrastructure must catch up. If utilities don't scale up, power shortages, higher costs, and delays in AI adoption could follow. That's why **modernizing energy grids** is critical for the AI revolution.

### Data Center Power Demand (U.S & Rest of World)



By 2030, AI-driven data centers could account for 30% of all global data center power consumption.

### Workload Demand & Data Center Power Consumption



## The Itron approach

- **Intelligent Platform:** Itron's integrated system of endpoints, including sensors, switches, and meters, collects data, controls devices, and takes action in the field.
- **Communication Networks:** Itron's networks harvest data from endpoints and deliver it where it is needed, ensuring seamless data flow for utilities and cities.
- **Software & Services:** Itron's solutions turn raw data into actionable insights, helping customers improve operational efficiency, system resilience, consumer engagement, demand management, and profitability.



Focusing on  
Customer Success



Delivering Innovation  
to Markets



Leveraging Domain  
Expertise and Insights

## Itron's Awards & Recognition

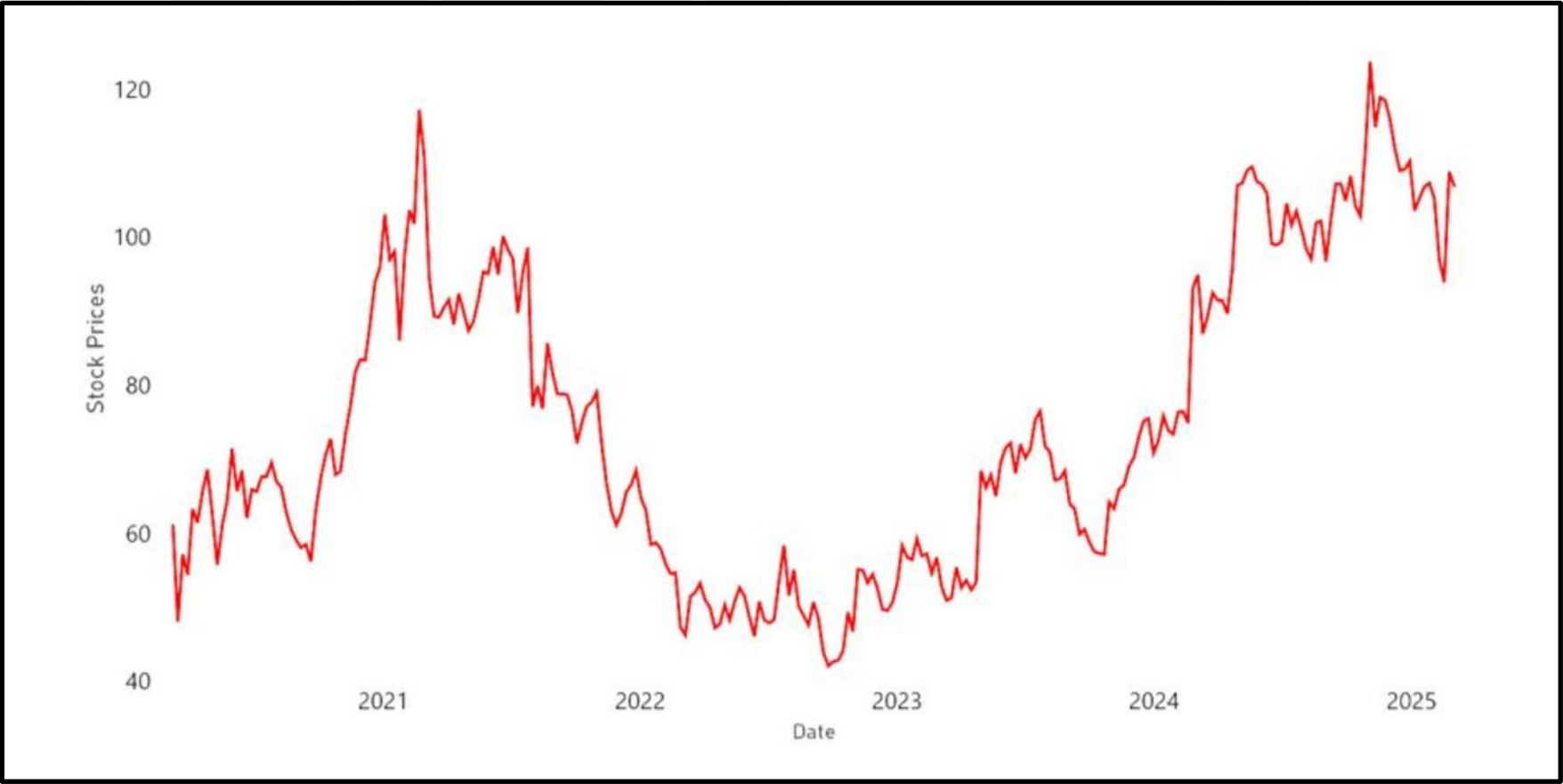
- Ranked #29 on Barron's list of 100 Most Sustainable Companies
- Recognized as an ESG Trendsetter by Nasdaq
- Leader in Navigant's Demand Response and Field Area Networking Leaderboards
- 2024 Gartner® Magic Quadrant for Managed IoT Connectivity Services, Worldwide
- 2023 Newsweek Honoree on America's Greatest Workplaces for Diversity and America's Greatest Workplaces lists

## Background

- **Sector:** Technology - Renewable Energy/Distributed Power System Makers
- **Industry:** Smart Grid, Energy Management, Industrial Internet of Things (IIoT)
- **Headquarters:** Liberty Lake, Washington, USA
- **Specialization:** Energy and water resource management
- **Key Markets:** Electric, gas, and water utilities; Smart city initiatives globally
- **Mission:** Optimize energy efficiency, enhance grid reliability, and promote sustainability

## Stock Performance

- **Ticker:** NASDAQ: ITRI-US **Market Cap:** 7.07B **Beta (3Y Adjusted):** 1.26  
**52 Week Range:** CA\$116.55 - CA\$173.99 **Avg. Volume:** 712,806





## Itron's Management



### Thomas L. Deitrich, CEO

Since August 2019, he has been the President and CEO of Itron, with prior leadership roles at Freescale Semiconductor, Flextronics, Sony-Ericsson/Ericsson, and GE. He also serves as a Director at ON Semiconductor.



### Joan S. Hooper, CFO

Since June 2017, he has been the SVP and CFO of Itron, overseeing financial strategy, planning, reporting, investor relations, and risk management. He was previously CFO at CHC Helicopter (2011-2015) and held executive finance roles at Dell, including CFO for Global Public..



### Donald L. Reeves, SVP of Outcomes

Since Sept 2019, he has been SVP of Outcomes at Itron, managing software, services, delivery teams, managed services operations, and customer support. Joined Itron in 2018 through the SSNI acquisition and was previously CTO at SSNI, with engineering leadership roles at tech startups.



### John F. Marcolini, SVP of Networked Solutions

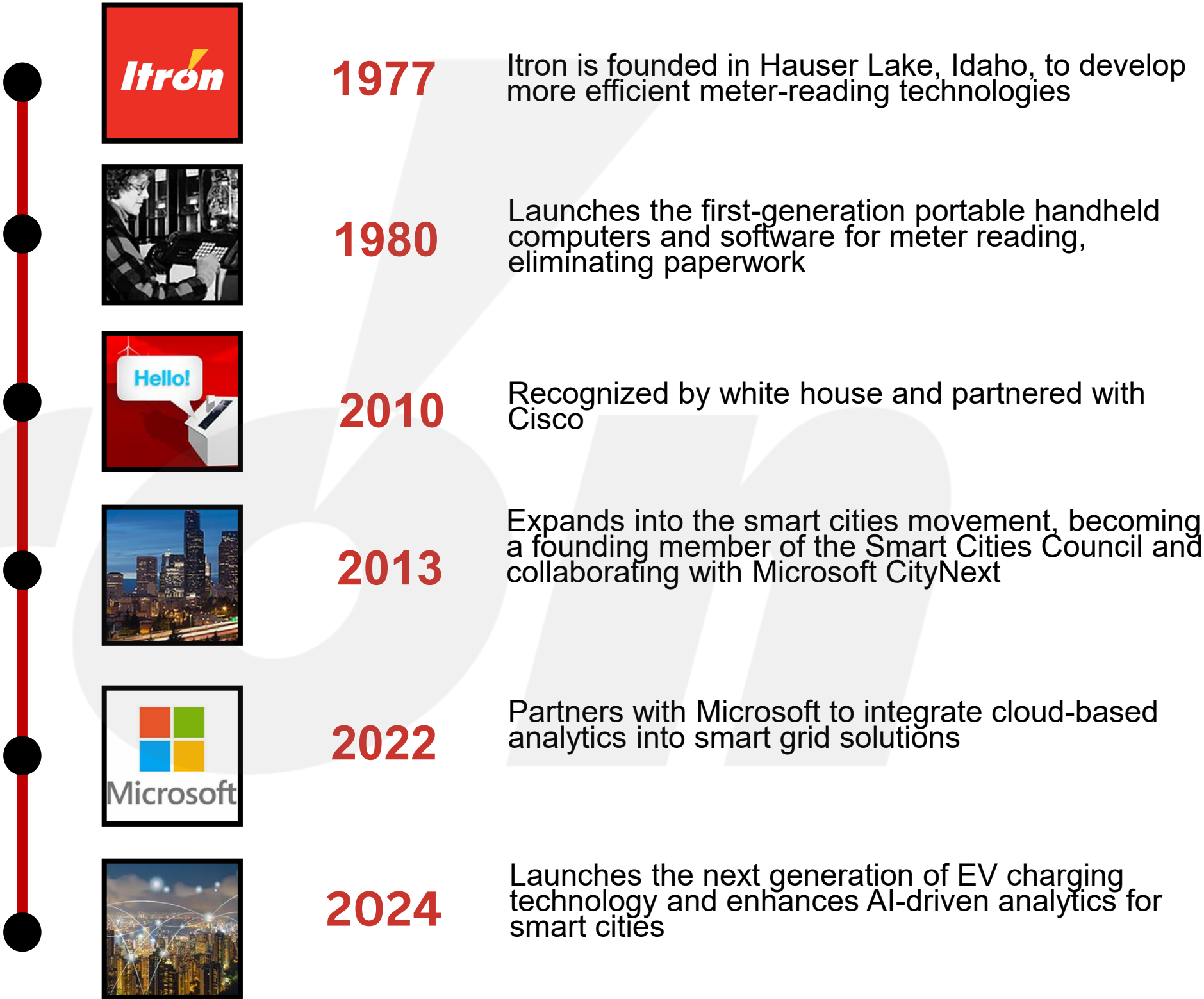
Since July 2020, he has been SVP of Networked Solutions at Itron, overseeing product development, marketing, and strategy for global networking platforms and smart cities. He joined Itron in 2018 through the SSNI acquisition having over 20 years of experience in product management and IIoT.



### Justin K. Patrick, SVP of Device Solutions

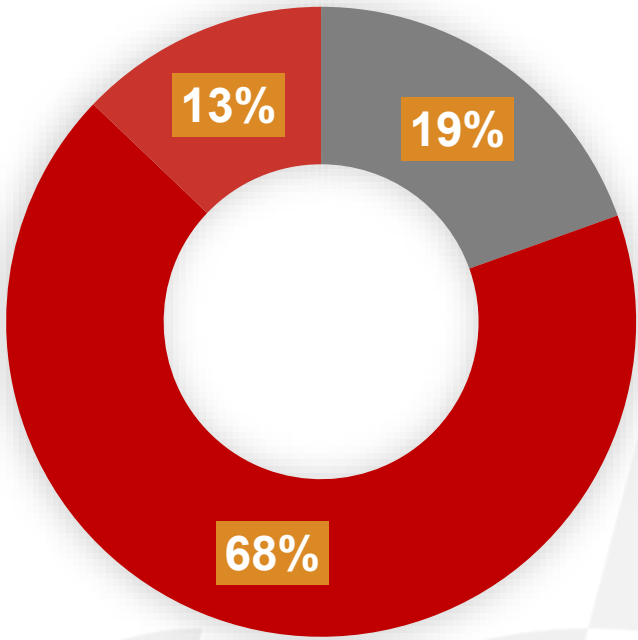
Since January 2020, he has been the SVP of Device Solutions at Itron, leading strategy for measurement, safety, and operational devices for utilities and cities. He previously held senior roles at Johnson Controls International, Auer Steel and Heating Supply, and Carrier Corporation.

## Itron's Key Millstones



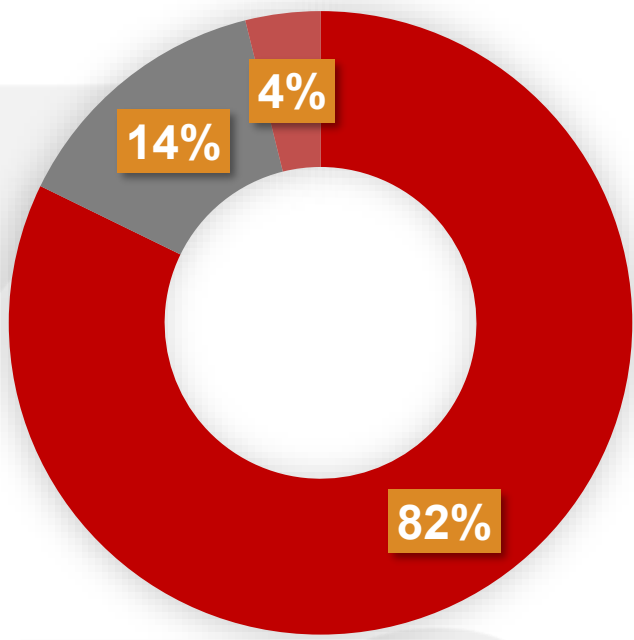
Business Performance	FY2024	FY2023
Operating Revenue (\$thousands)	\$2,440,837 (+12.29%)	2,173,633
Gross Profit (\$thousands)	\$839,317 (+17.57%)	\$713,908
Net income attributable to Itron, Inc. (\$thousands)	239,105 (+146.70%)	\$96,923
Net income per common share - Diluted	\$5.18 (+145.50%)	\$2.11

By business segment



- Device solutions
- Network solutions
- Outcome solutions

By geographic region



- United States & Canada
- Europe, Middle East & Africa
- Asia Pacific

Device Solutions

- **Sensors and Controls:** Equipment that monitors and regulates utility distribution networks to enhance efficiency and reliability.



Network Solutions

- **Advanced Metering Infrastructure (AMI):** Integrates systems that facilitate two-way communication between smart meters and utilities, supporting functions like remote meter reading and outage detection.
- **Communication Modules:** Hardware that enables connectivity across various network types, ensuring reliable data flow within utility operations.



Outcomes Solutions

- **Itron Analytics:** Software solutions that analyze consumption patterns, detect anomalies, and forecast demand to inform decision-making.
- **Smart Meters:** Advanced devices that provide accurate, real-time data on electricity, gas, and water usage.
- **Managed Services:** Ongoing support and operation of utility systems, including data management & system maintenance; optimizing performance and resource utilization.





Beyond the Hype: Delivering Real AI Value for Utilities

- Itron understands the specific and demanding needs of the utility industry and offers field-proven AI and ML solutions that address critical challenges
  - Decades of experience **30+ years** in leveraging ML for forecasting and AI-enabled solutions.
  - Trusted partner ecosystem and leadership in distributed intelligence, providing global expertise.
  - Focus on delivering quality, trustworthy, and timely data for essential utility use cases.

Utility Use Case	Machine Learning	Artificial Intelligence
DER Planning (Forecasting)	X	
DER Asset Awareness & Protection	X	
DERMS	X	
Grid Awareness	X	
Revenue Assurance	X	
Grid Operations, Connectivity & Planning	X	
DER Optimization	X	
DEM Analytics		X
Data Management (IEE MGM)		X
Water Pipe Asset Management	X	

IntelliFLEX: Unlocking the Potential of Distributed Energy Resources

IntelliFLEX Benefits













- Boosts Grid Capacity:** Integrates up to 20% more DERs without costly infrastructure upgrades
- Enhances Reliability:** Provides real-time control and optimization for better grid stability.
- Reduces Costs:** Lowers operating expenses for utilities and potential savings for consumers.
- Ensures Compliance:** Helps utilities meet evolving regulatory standards.
- Scalable and Secure:** Built for millions of DERs with AI-powered forecasting



Itron’s IntelliFLEX solution addresses rising electrification, renewables integration and DER adoption, ensuring cost-effective, scalable grid modernization." - Don Reeves, SVP of Outcomes, Itron.



No. 1 Challenge facing utility companies and cities

Australia 	Canada 	France 	India 	UK 	U.S.A 
 Meeting Increase demand <b>35%</b>	 Enhancing Safety <b>43%</b>	 Meeting Increase demand <b>39%</b>	 Meeting Increase demand <b>35%</b>	 Enhancing Safety <b>38%</b>	 Meeting Increase demand <b>29%</b>

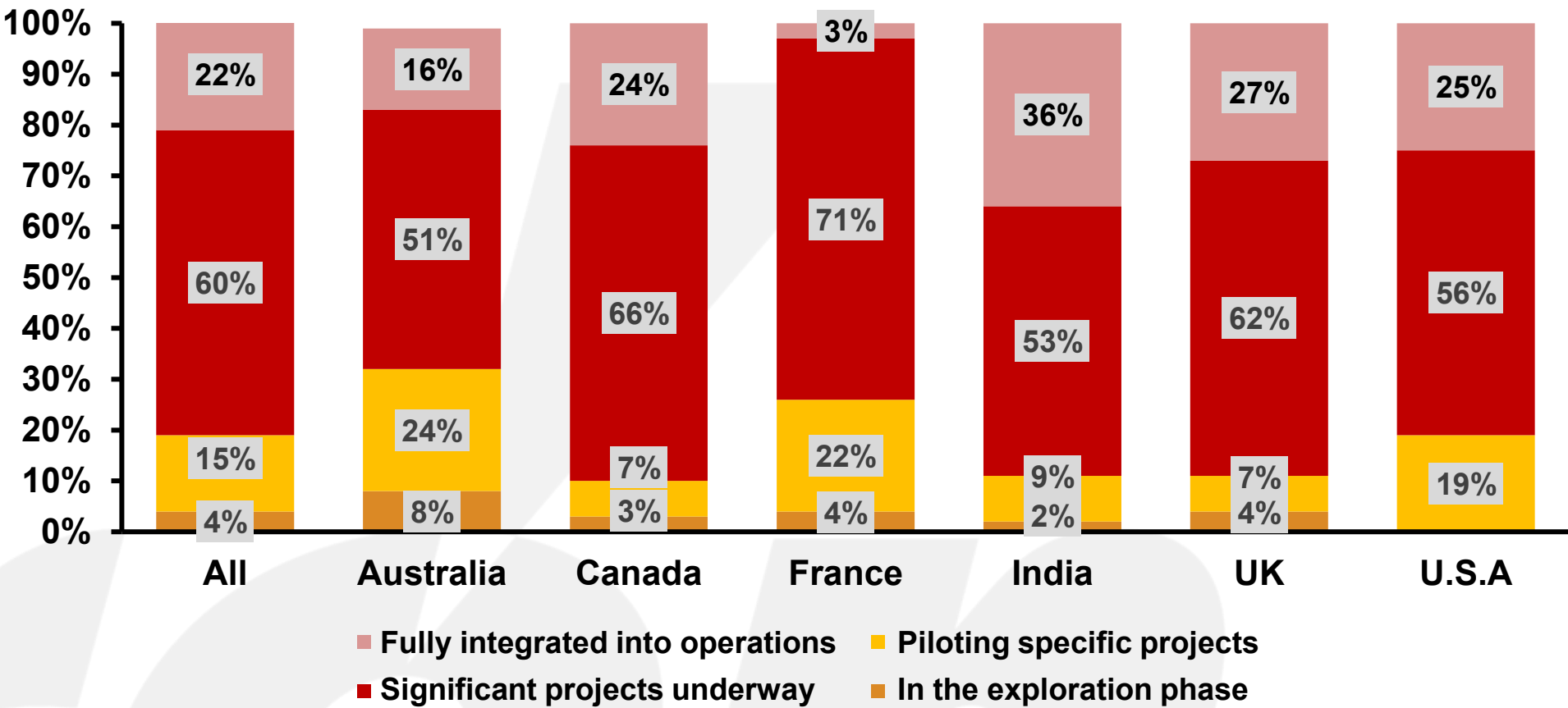
Enhancing safety: A top priority for utilities

- Safety remains a critical challenge for utilities, nearly matching the urgency of meeting energy demand **32%**. As AI and ML reshape decision-making, ensuring safe delivery of power, gas, and water becomes even more complex.
- Rapidly evolving grids and infrastructure add to the challenge, but AI is proving valuable; its top utility use case is detecting and managing potential hazards.

Opportunities with Policies

- The U.S. Inflation Reduction Act (IRA) provides tax incentives for companies investing in clean energy. As utilities expand **solar, wind, and storage**, they need **Itron’s smart metering and distributed energy resource (DER) management** solutions to balance the grid.
- The **EU AI Act** may introduce stricter energy consumption rules, requiring better tracking and reporting—something Itron’s **energy analytics** can support.

Across geographies AI projects are underway within the utilities sector



Market Opportunities

- **AI Adoption in Utilities:**
  - 22% of utilities have fully integrated AI into their operations, with 60% engaged in mature projects (Itron Report).
- **Key Growth Drivers:**
  - Increasing energy demand, with a 33% rise expected by 2050.
  - Expansion of data centers (e.g., Microsoft's plan to build 50-100 new data centers annually).
  - Sustainability initiatives like renewables and electric vehicles (EVs).
- **Challenges in the Sector:**
  - Safety concerns and the need for predictive maintenance.
  - Workforce skills gap, with 43% of utilities lacking AI expertise.



Providing Sustainable Solutions

Itron is innovating new ways for utilities and cities to manage energy and water. With Itron’s solutions, our customers can work together and use data captured by our intelligent endpoints, sensors and systems to cost-effectively leverage their infrastructure to deliver multiple services and applications on a reliable, intelligent platform capable of serving all their consumers.

**At least. 6.8M** *metric tons of customer GHG avoided*

In one year, this is equivalent to:

**765M**

gallons of gas consumed

**1.6M**

gasoline-powered cars driven

**1.3M**

homes' electricity use

Improving Our Environmental Impact

Itron's dedication to and environmental excellence is formalized through comprehensive Environmental and Sustainability Vision and Policy and Supplier Code of Conduct. These policies encompass not only Itron's internal operations but also extend to suppliers and contractors, ensuring alignment with the company's sustainability objectives throughout the entire value chain. To reinforce this commitment, Itron mandates the completion of health, safety and environmental (HSE) training for all employees

Lowest **Recordable and Lost Time** rates in Itron's history

**50%**

reduction in Scope 1 & Scope 2 emissions  
—Five Years Ahead of Target\*\*

**88%**

of manufacturing facilities  
**ISO 14001 certified**

Supporting People and Communities

**90%**

of employees surveyed intend to stay

**90%**

of employees' work experience meets/ exceeds expectations

**2023**

One of Newsweek's *Greatest Workplaces for Diversity*

**+\$1M**

in corporate philanthropy, community investment and educational outreach

Our Itron Fit program closely aligns with the mission and vision of our company. The program mirrors many of the company-wide values by focusing on ways to stay active while promoting a more resourceful and sustainable future. For instance, our employees participated in activities such as the Run for the Water, trail and beach cleanups, the Great Virtual Race, and in person and virtual fitness and well-being events.

Operating with Integrity

**1/3**

of Board of Directors are women

**100%**

completion, *Global Code of Conduct Training*

**AA**



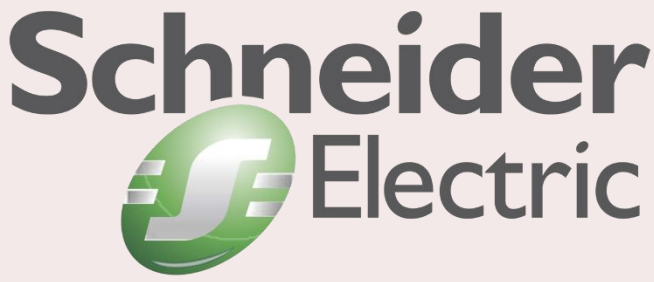

"Leader" category by MSCI and "Low Risk" profile by Sustainalytics

**92.2%**

completion, Anti-Trust & Competition Training

The protection and integrity of data is foundational to driving our operational excellence, improving our customers’ experience and ensuring our continued growth and success. To address cybersecurity risks and threats, we have in place teams, processes, tools and programs for protecting company and customer information



Competitor	Overview	Strengths	Why is Itron Better?
	Landis+Gyr is a global leader in smart metering solutions, offering hardware and software that enable utilities to optimize energy distribution and consumption.	They focus heavily on smart meters, energy management systems, and grid automation.	Itron offers a broader range of solutions, including advanced metering infrastructure (AMI), grid analytics, and demand response. This allows for a more holistic approach to energy management compared to Landis+Gyr's primary focus on metering solutions.
	Siemens Energy is a major player in the energy sector, providing a wide range of products and services related to power generation, transmission, and distribution, including smart grid solutions.	Siemens Energy has a robust presence in traditional energy generation and distribution technologies, along with growing investments in digital energy solutions and smart grid technologies.	Itron is more focused on advanced data analytics, which allows utilities to improve operational efficiency and better manage energy demand. Siemens Energy is more oriented towards hardware solutions in power generation and transmission.
	Schneider Electric is a major player in energy management and automation solutions, focusing on efficiency and sustainability in the energy sector.	Schneider provides comprehensive solutions across the entire energy value chain, including energy management software, automation, and grid optimization.	Dedicated Focus on Utility Solutions: While Schneider Electric has a broad focus across many industries, Itron specializes in utility solutions, particularly metering and grid analytics, which gives it a more refined expertise in this area.
	Honeywell provides smart grid, energy management, and building automation solutions. It competes in several areas where Itron operates, including energy consumption data collection, monitoring, and grid optimization.	Honeywell has a strong presence in building energy management and home automation, in addition to industrial and grid solutions.	Itron's AMI solutions are more comprehensive and widely used for smart grid modernization and smart meter deployments, which is a key differentiator from Honeywell's broader approach.

## Powering the Future: Itron's Role in the Data Center Energy Surge

Itron is strategically positioned to capitalize on the surging energy demands of AI-powered data centers, which are projected to increase by **165% by 2030**, requiring an estimated **\$720 billion in grid investment**. As utilities struggle with grid congestion, reliability concerns, and the integration of renewables, Itron's expertise in **grid automation, demand response, and energy management** makes it a critical enabler of the modern energy transition.

With a well-established customer base of major utilities, Itron provides **scalable, AI-driven solutions** that enhance power distribution efficiency, outage detection, and renewable energy integration. The company's **recurring revenue model, advanced analytics capabilities, and strategic partnerships** position it as a long-term winner in the smart grid revolution, making it a compelling investment opportunity.

### Problem Statement: The Energy Challenge of AI & Data Centers

- **Key Message:** AI-driven data centers are skyrocketing in power demand, creating grid stress and requiring massive utility investment.
- Goldman Sachs forecasts **165% increase in data center power demand by 2030**
- **\$720B in grid investment needed** to keep up
- Utilities struggle with **grid congestion, reliability, and renewables integration**

### Market Opportunity: Who Stands to Benefit?

- **Key Message:** Utilities and energy infrastructure players are positioned to benefit from this shift.
- **Data center energy demand forecast (2023-2030)**
- Growth in **hyperscale data centers & AI workloads**
- Increased **grid modernization spending by utilities**

### Itron's Role: The Smart Grid Solution Provider

- Key Message:** Itron is uniquely positioned to capitalize on utility spending for smarter grids.
- Expertise in **grid automation, demand response, and energy management**
  - Product lines that address **data center energy challenges**
    - **Grid Edge Solutions** (load balancing, demand response)
    - **Distribution Automation** (reliability, outage detection)
    - **DER Integration & Smart Meters** (supporting renewables)

#### Problem

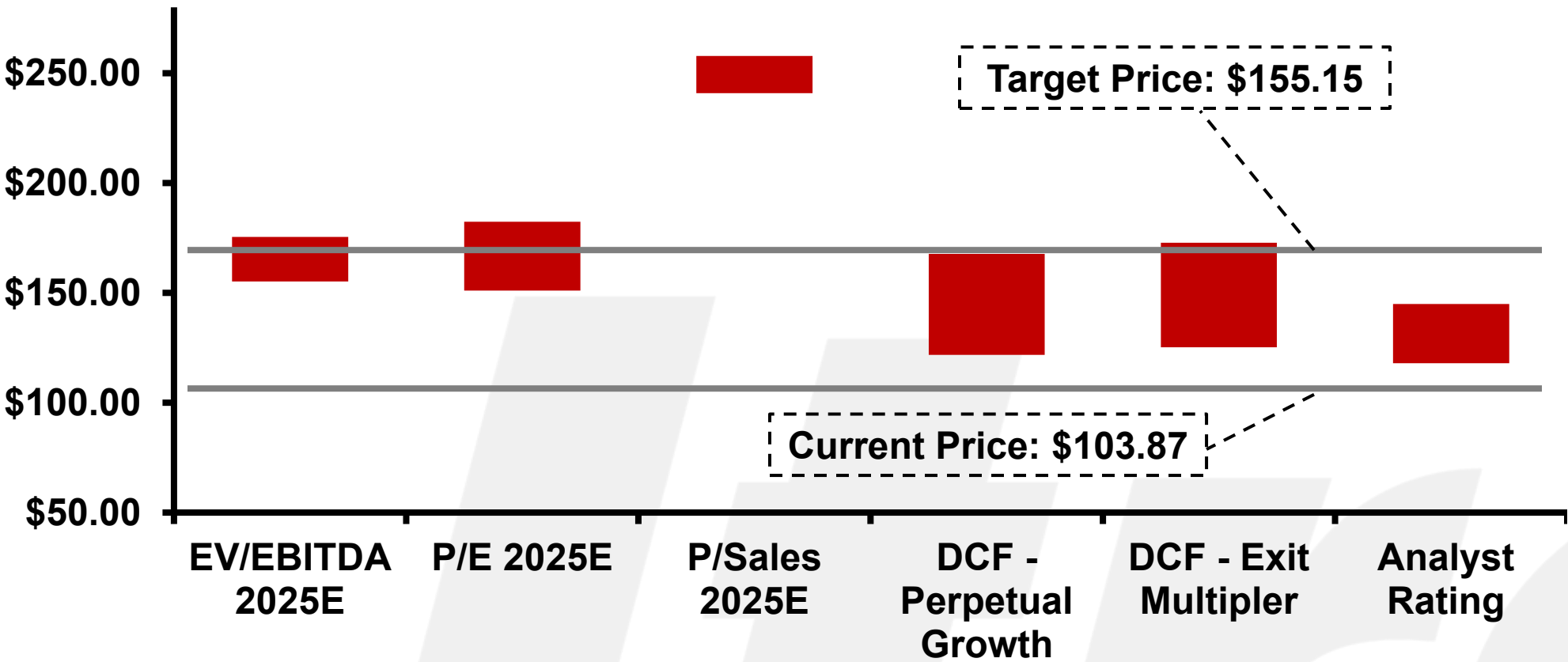
The utility sector faces increasing complexity with the integration of DERs, and evolving consumer demands, all while needing to maintain reliability and efficiency. This requires a fundamental shift towards smarter grid management

#### Solution

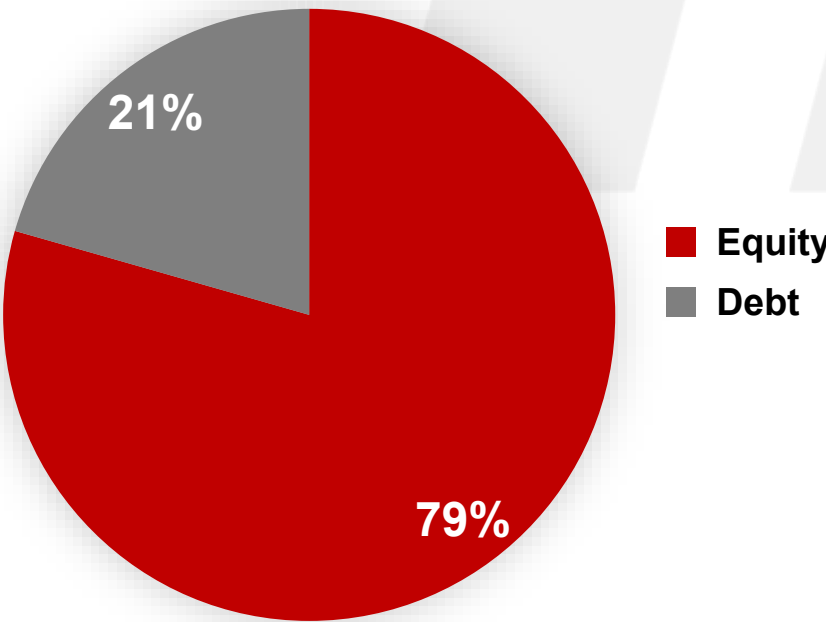
Itron's core business provides the foundational technology (devices, networks, and software) to modernize the grid, improve efficiency, and enable advanced applications like AI-powered optimization



Football Field Analysis



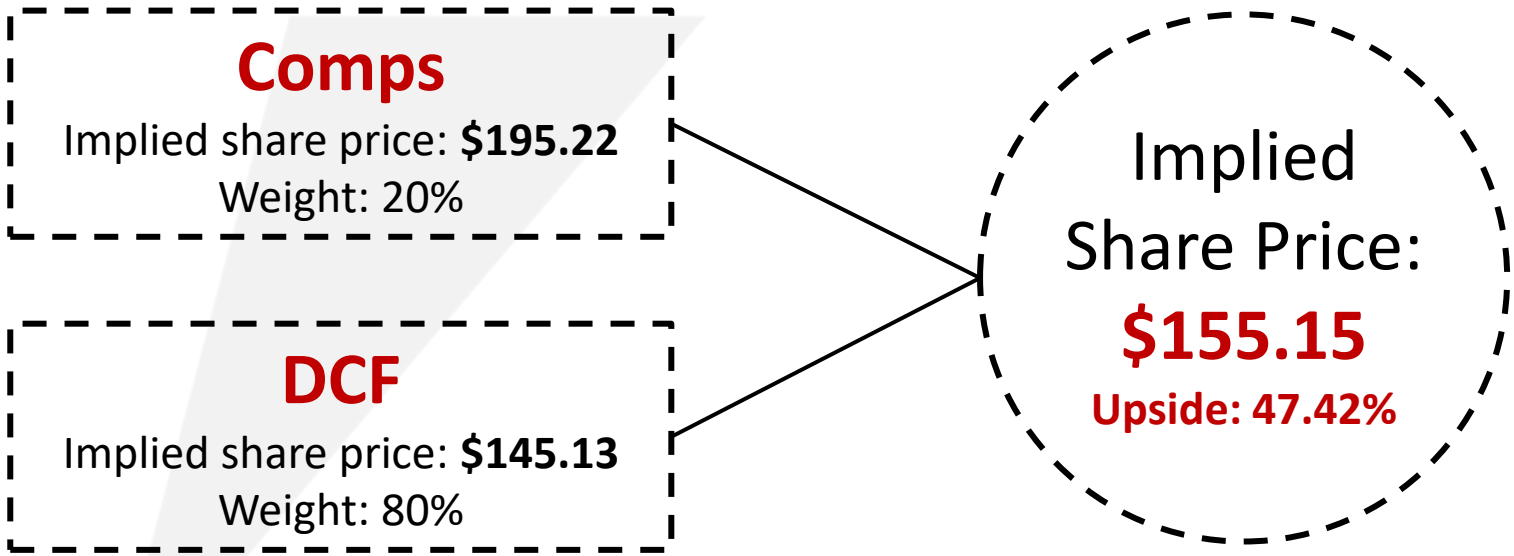
Capital Structure



Key Ratios

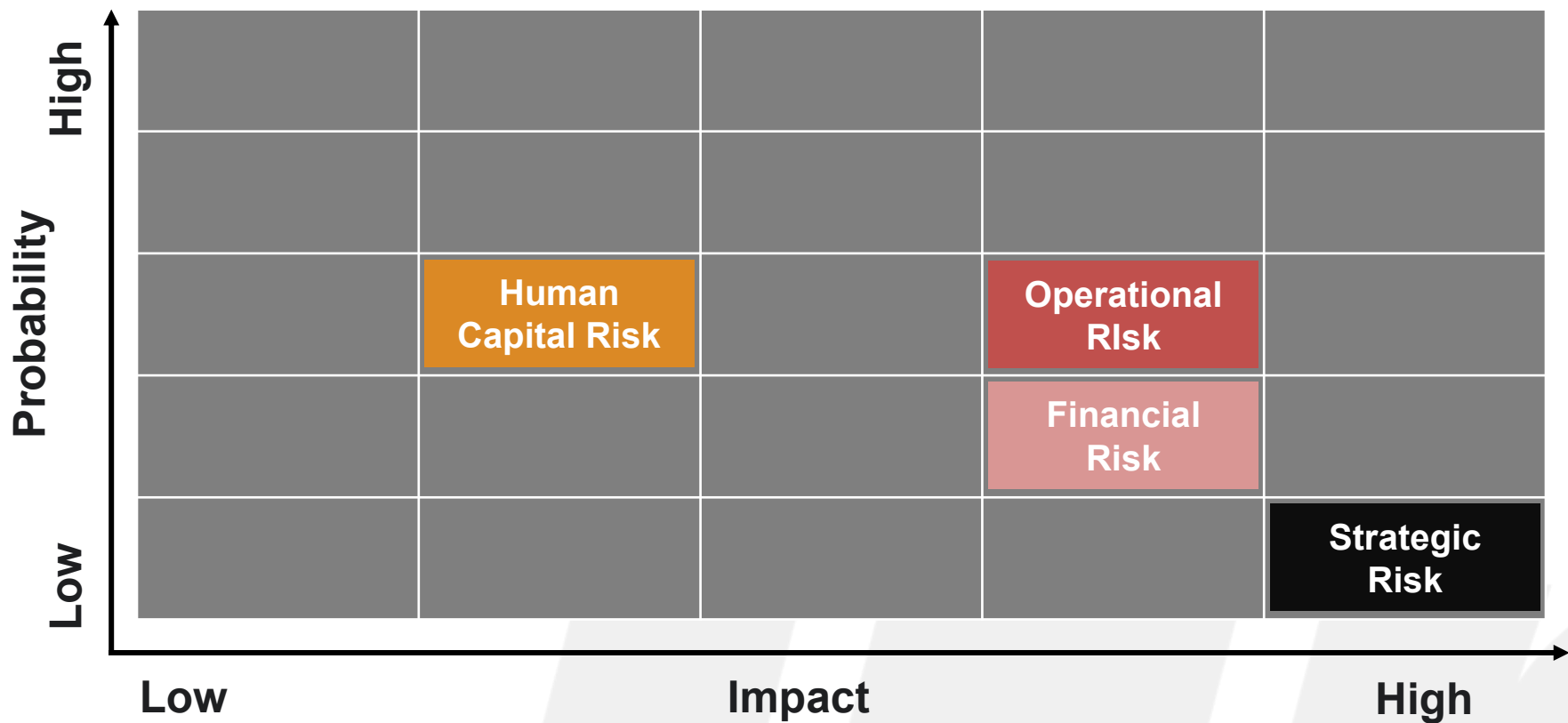
P/E Ratio	20.65	PEG	0.68
Price/FCF	24.16	EBITDA Grwth	11%

Implied Share Price



		Implied Share Price					
WACC		Perpetual Growth Rate					
		6.00%	6.25%	6.50%	6.75%	7.00%	
	9.16%	\$104.76	\$109.72	\$115.61	\$122.73	\$131.49	
	8.91%	\$113.29	\$119.47	\$126.92	\$136.09	\$147.67	
	8.66%	\$123.49	\$131.29	\$140.90	\$153.02	\$168.80	
	8.41%	\$135.86	\$145.92	\$158.62	\$175.14	\$197.51	
	8.16%	\$151.18	\$164.47	\$181.77	\$205.20	\$238.74	
		Implied Share Price					
WACC		Exit Multiple					
		14.20x	14.45x	14.70x	14.95x	15.20x	
	9.16%	\$137.94	\$139.54	\$141.14	\$142.74	\$144.35	
	8.91%	\$140.69	\$142.32	\$143.96	\$145.60	\$147.24	
	8.66%	\$143.49	\$145.17	\$146.85	\$148.52	\$150.20	
	8.41%	\$146.37	\$148.09	\$149.80	\$151.52	\$153.23	
	8.16%	\$149.32	\$151.07	\$152.83	\$154.58	\$156.34	

Risks



**Strategic risk**

**Rapid Technological Advancements**

The utility sector is rapidly adopting AI and ML. Falling behind in these advancements could make Itron's offerings less competitive.

**Financial Risk**

**Cost and Technology Uncertainty in AI Adoption**

AI/ML adoption in utilities faces two major challenges: high perceived investment costs **41%** and concerns about unproven technology **39%**

**Human Capital Risk**

**Workforce Readiness**

Many utility executives see AI and ML as crucial, but a workforce readiness gap and lack of expertise remain concerns

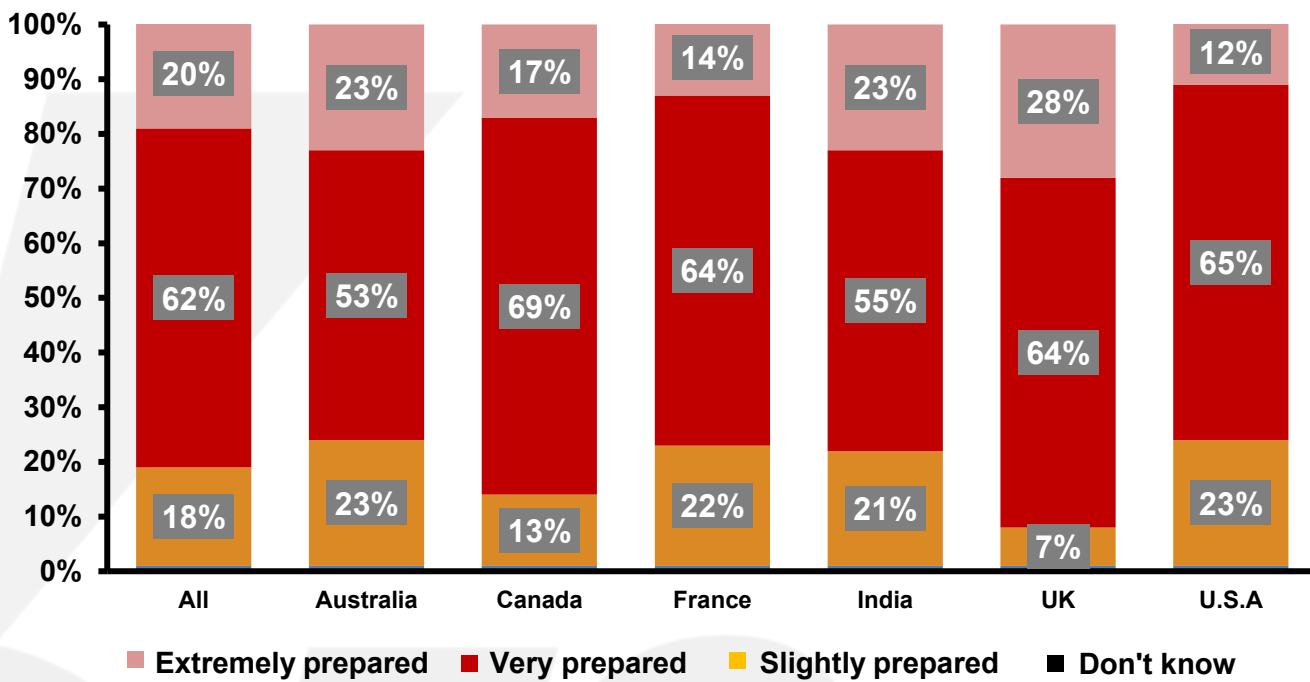
**Operational Risk**

**Supply Chain Disruptions**

Itron's reliance on a global supplier network for electronic components makes it vulnerable to disruptions from geopolitical tensions, natural disasters, or global crises

Despite barriers, utilities say they're ready

- While utility leaders cite expertise as a barrier, **82%** believe their workforce is well-prepared. AI adoption will take time, and if talent gaps persist, continued workforce training and investment in proven solutions like edge intelligence may help.



Mitigations

**Strategic risk**

Itron invests in R&D to stay ahead of tech trends and forms strategic partnerships with leaders like NVIDIA and Microsoft to integrate AI and distributed intelligence into its products.

**Financial Risk**

Itron can mitigate the risk of AI adoption by optimizing its AI investments through cost-effective, scalable solutions, while partnering with proven AI vendors like NVIDIA and Microsoft.

**Human Capital Risk**

Itron combats the workforce readiness gap through training programs, university partnerships, and competitive compensation to retain skilled AI and ML talent

**Operational Risk**

The company utilizes advanced data analytics to monitor and anticipate potential supply chain issues, enabling proactive management of inventory and logistics.



The background of the image is a scenic view of Central Park in New York City. In the foreground, there is a calm body of water, likely the Serpentine Lake, which reflects the surrounding greenery and the city skyline. The trees are lush and green, with some showing early autumn colors. In the background, several tall skyscrapers of New York City are visible against a clear blue sky. The overall atmosphere is peaceful and urban.

March, 2025

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Recommendation .....	<b><u>BUY</u></b>
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A scenic view of Central Park in New York City. In the foreground, there's a calm pond reflecting the surrounding greenery and the city skyline. The middle ground is filled with lush trees, some with autumn-colored leaves. In the background, several tall skyscrapers of Manhattan are visible against a clear blue sky. A white rectangular box with a thin black border is centered over the image, containing the word "Appendix" in a large, bold, red font.

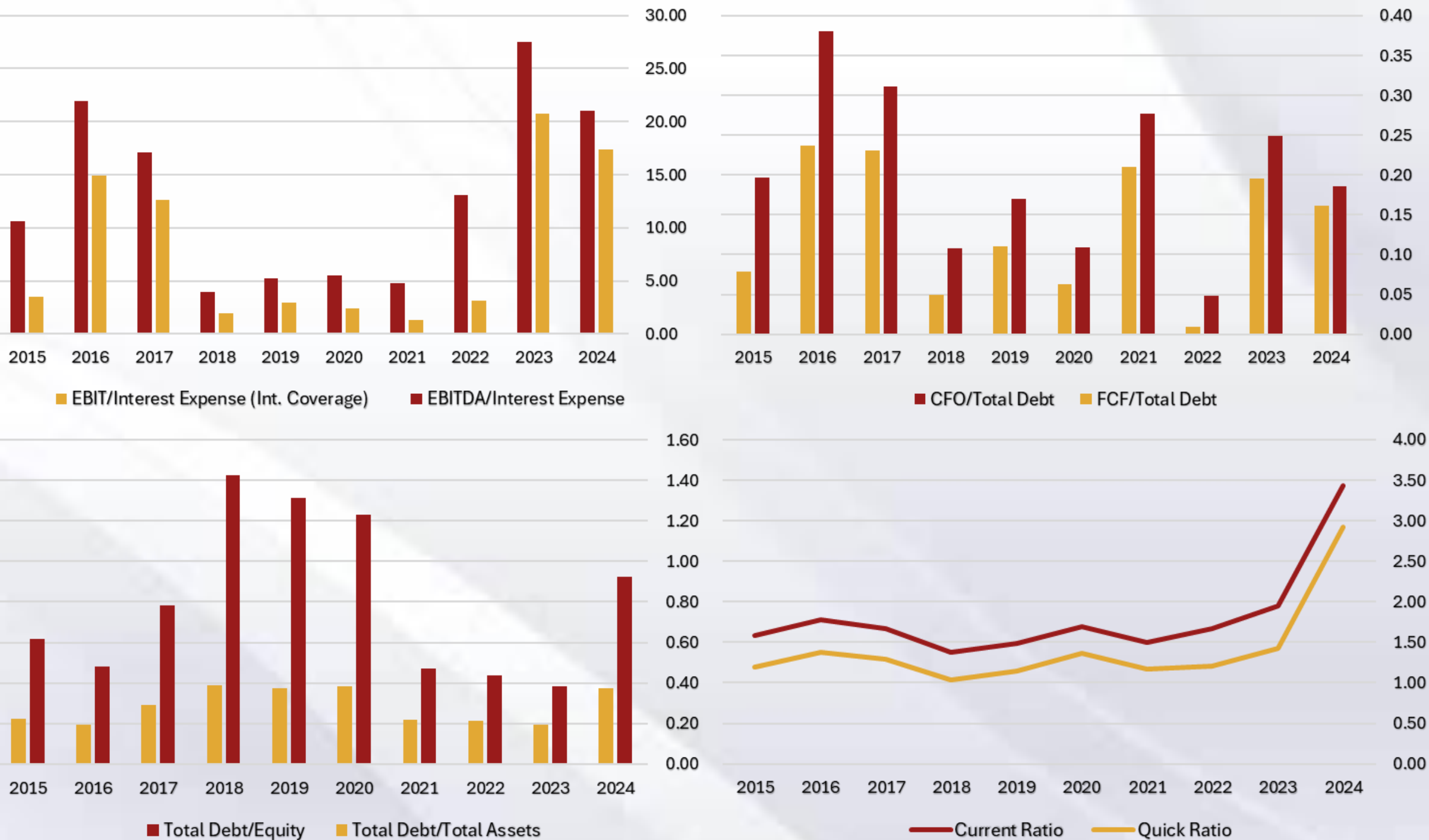
# Appendix



# Financial Performance



- Strategic Partnerships:** Collaborations with technology leaders like NVIDIA and Microsoft facilitate the integration of advanced technologies such as AI and distributed intelligence into Itron's offerings.
- Continuous Innovation:** Itron invests in research and development to stay ahead of technological trends, ensuring its products and services remain competitive.



**P/E Ratio**  
**20.65**

**PEG**  
**0.68**

**Price/FCF**  
**24.16**

**EBITDA Growth**  
**11%**

[Excel link](#)

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[https://utoronto-my.sharepoint.com/:x:/r/personal/callum\\_bownesslinegar\\_mail\\_utoronto\\_ca/Documents/My%20Notebook%20@%20University%20of%20Toronto/MGT341%20FINAL%20Assignment.xlsx?d=w49b2c38f36994069a6c7cce63fa04ac7&csf=1&web=1&e=KlhKM8](https://utoronto-my.sharepoint.com/:x:/r/personal/callum_bownesslinegar_mail_utoronto_ca/Documents/My%20Notebook%20@%20University%20of%20Toronto/MGT341%20FINAL%20Assignment.xlsx?d=w49b2c38f36994069a6c7cce63fa04ac7&csf=1&web=1&e=KlhKM8)