

Bahrain's ICT sector is a key area of focus. It is supported by the government's efforts to promote digitalization and innovation. The strategy includes targets such as boosting the number of ICT startups, creating more jobs for Bahrainis, enhancing cybersecurity skills and automating government services. The Labour Fund (Tamkeen) plays a crucial role in training Bahrainis in the ICT field through employment and training programs. These initiatives aim to enhance the capabilities of Bahraini individuals, empower them to contribute effectively to the sector, and generate more employment opportunities within the ICT industry.



Sector Opportunities & Trends

01. General Artificial Intelligence (Gen AI)

The convergence of sustainable technology and Artificial Intelligence, known as Gen AI, presents a significant opportunity within the ICT sector. The growing emphasis on sustainable practices, such as switching to electric vehicles and renewable energy, is complemented by the utilization of IoT sensors for efficient resource management. Additionally, the widespread accessibility of AI drives productivity enhancements across various ICT applications, including search engines, data analysis and communication tools.

02. Upskilling ICT talent

Tamkeen remains dedicated to empowering Bahrainis in the ICT sector through diverse initiatives, specialized programs and strategic partnerships with the private sector. Essential skills like data science, generative AI, DevOps, full stack development, software engineering, UX design and cybersecurity are crucial in the rapidly evolving tech landscape. Increasing the availability of ICT skills is paramount for technology disruption across all industries.

03. Datafication

As data sources like IoT, social media and digital platforms continue to expand rapidly, the datafication phenomenon is coming to the forefront. The concept of datafication involves transforming different aspects of daily interactions into data, allowing for real-time monitoring, in-depth analysis and informed decision-making. This trend has already translated into action in entertainment, shopping, social media, recruitment and hiring and credit rating, among others.

04. Sustainable technology

The spotlight on sustainable technology grows as societies aim for net-zero targets. This includes eco-friendly tech in electric vehicles and renewable energy. IoT sensors enable efficient resource utilization through monitoring and analysis. The synergy between sustainable technology and ICT drives environmental efficiency, fostering a greener future.

05. Cyber resilience

Cyber resilience goes beyond security by including measures to recover and ensure continuity when defenses fail, or circumstances prevent normal operations. This remains a top priority for organizations as the trend evolves to strengthen defenses to reduce cyber-attacks. New trends include remote working procedures and the use of AI and machine learning for automated cyber defense.

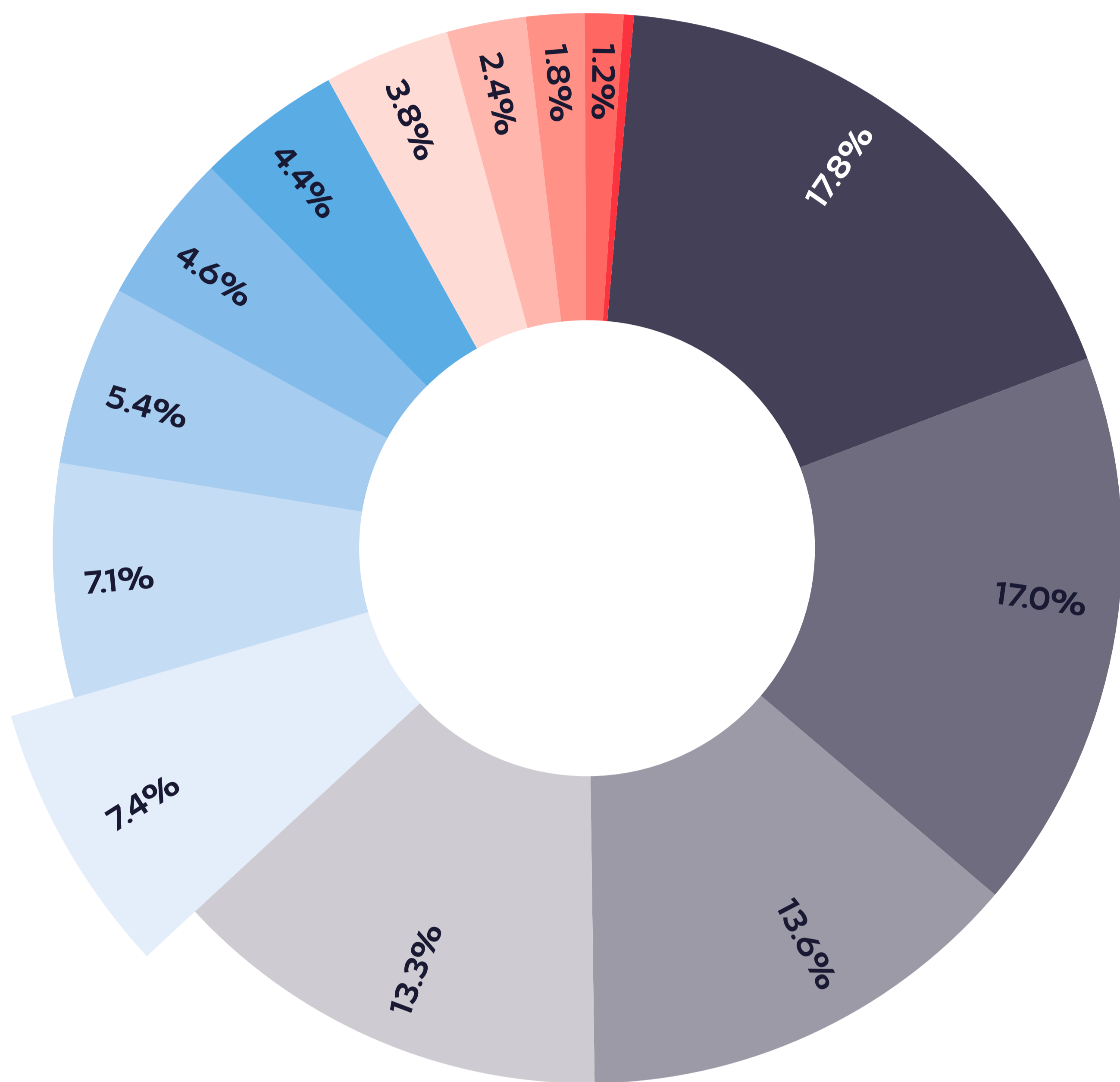
06. Blockchain

Beyond cryptocurrencies, blockchain technology has found widespread use in various industries requiring decentralized data storage and transparent transactions. This trend is mainly seen in supply chain management, managing medical data, money transfer and smart contracts, among others.

ICT Sector Economic Indicators

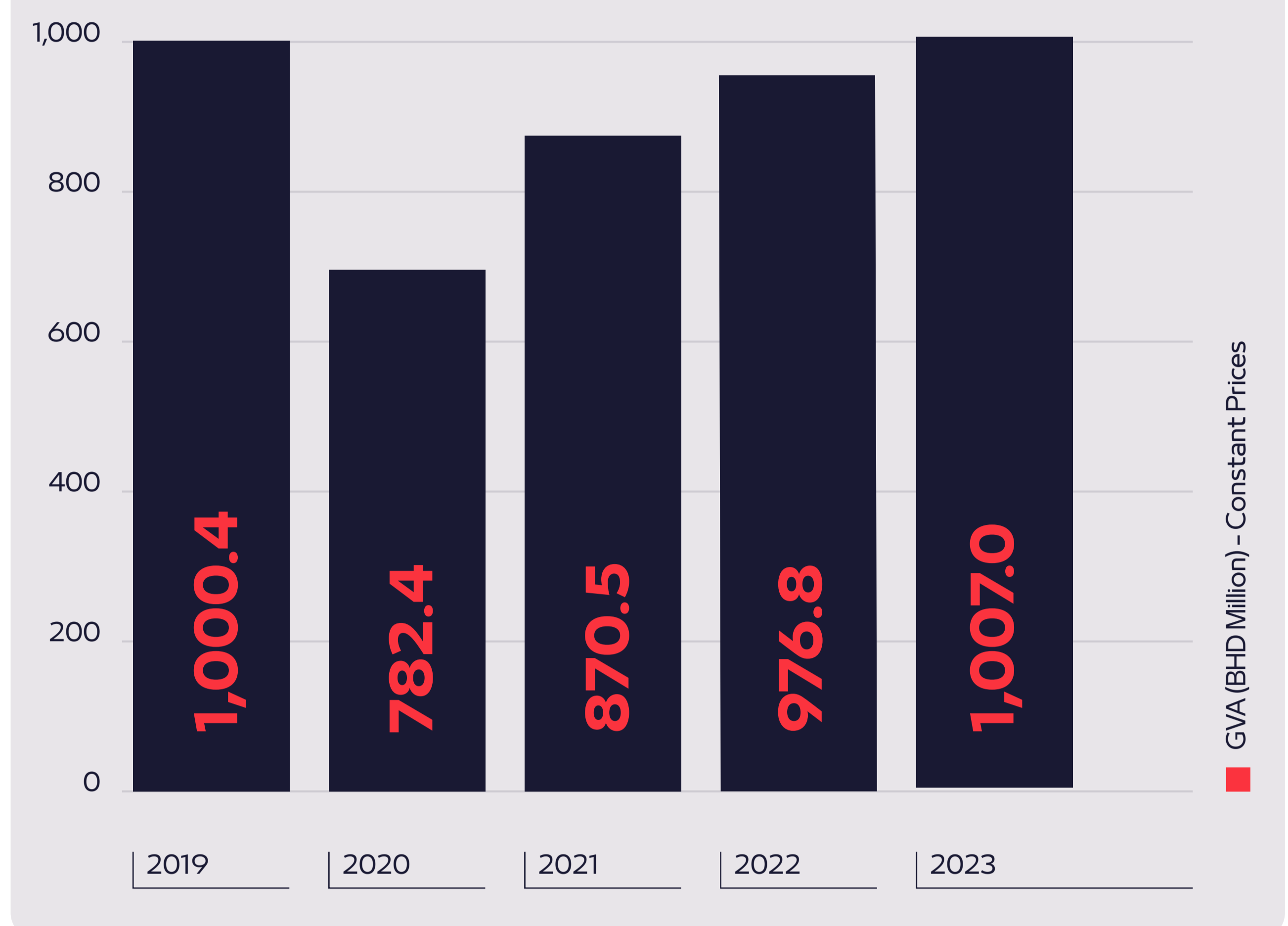
iGA-National Accounts, 2023

Transport and Communication Sector Contribution to Real GDP (% , 2023)



Financial & Insurance Activities	17.8%	Net Tax on Products	4.6%
Mining & Quarrying	17.0%	Trade	4.4%
Manufacturing	13.6%	Others ²	3.8%
Government Services	13.3%	Private Education Services	2.4%
Transport & Communication ²	7.4%	Hotels & Restaurants	1.8%
Construction	7.1%	Private Health Services	1.2%
Real Estate & Business Activities	5.4%	Agriculture & Fishing	0.3%

Transport and Communication Sector GVA¹ (BHD M, 2019 - 2023)



¹ Gross Value added (GVA) is the measure of the value of goods and services produced in an area, industry or sector of an economy

² Data extracted from National Accounts are categorized according to ISIC 3 – hence Transport & Communication are combined as a sector

³ Others include Electricity & Water, Other Social & Personal Services, Private Non-Profit Institutions, and Households with Employed Persons

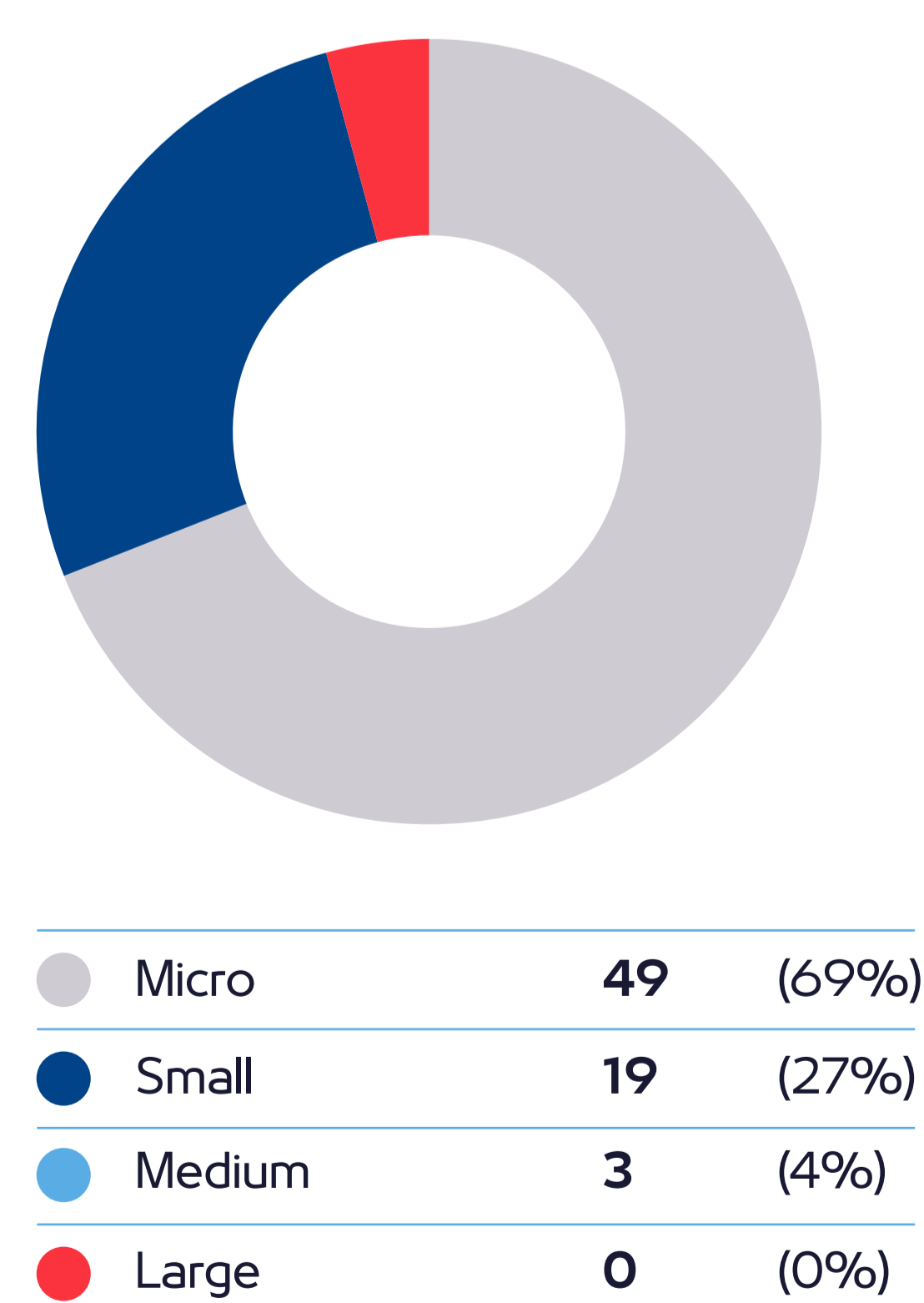
ICT Sector Enterprises

LMRA, Q1 2023 - BLMi

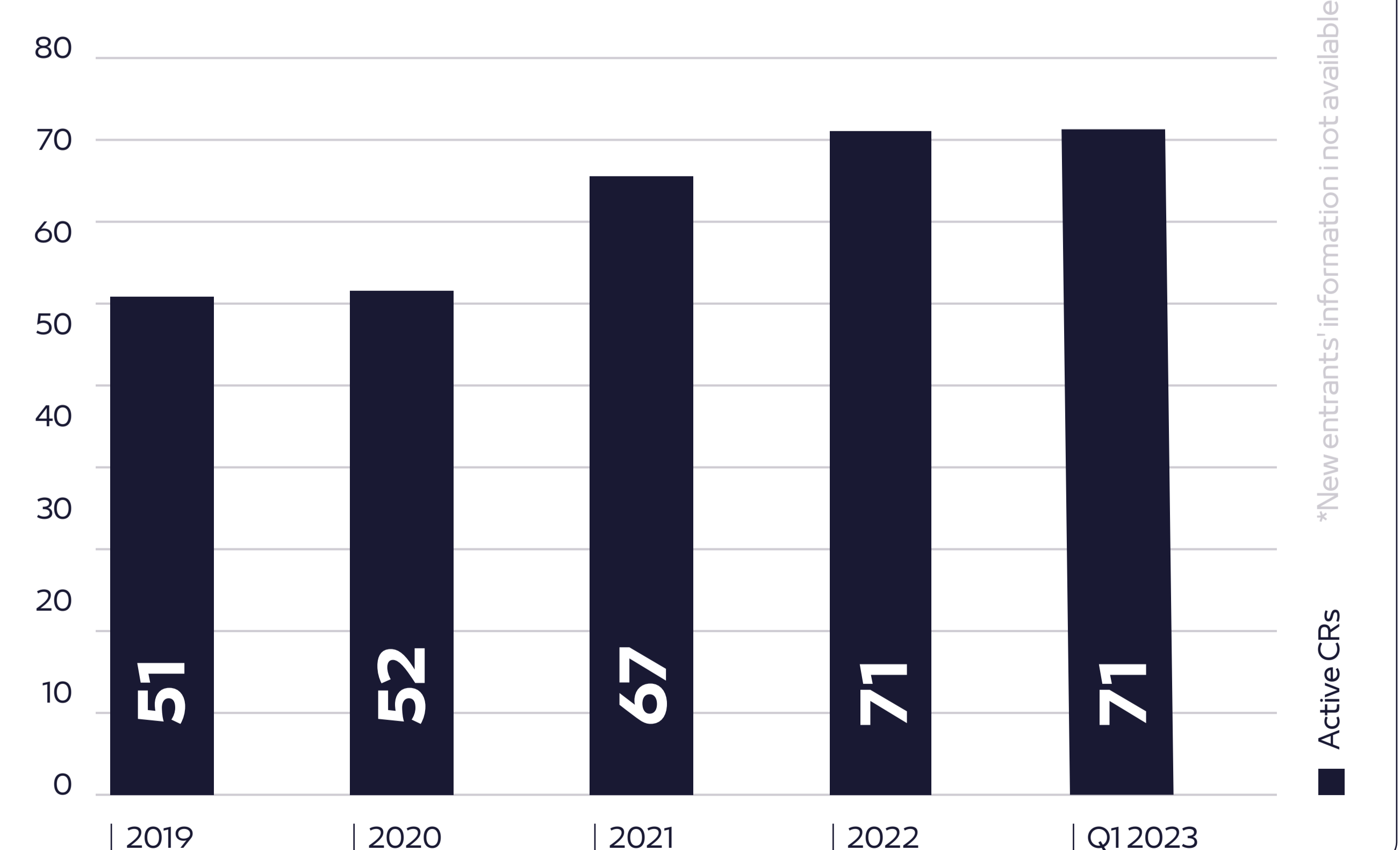
71
Active CRs

0.1%
of total Active CRs in Bahrain

ICT Sector by Enterprise Size (% , Q1 2023)



ICT Sector Active Commercial Registrations (2019 - Q1 2023)

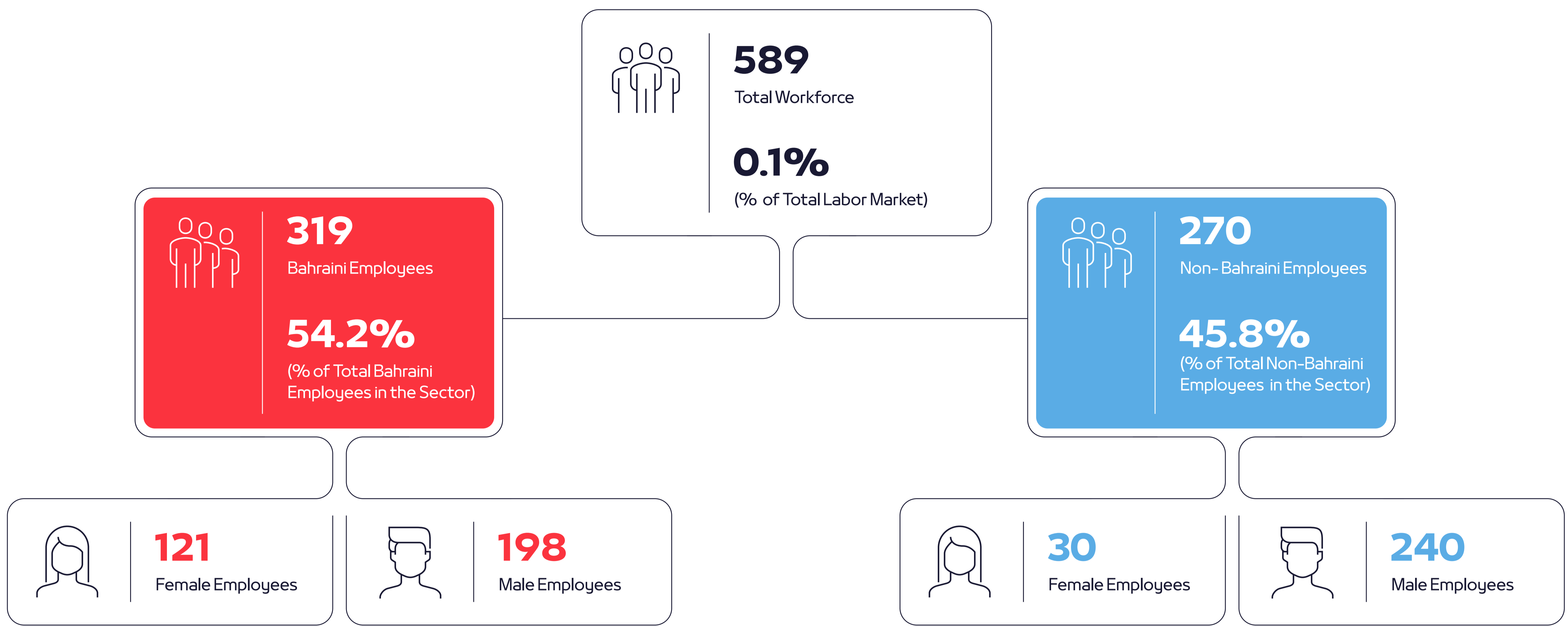


*New entrants' information not available

■ Active CRs

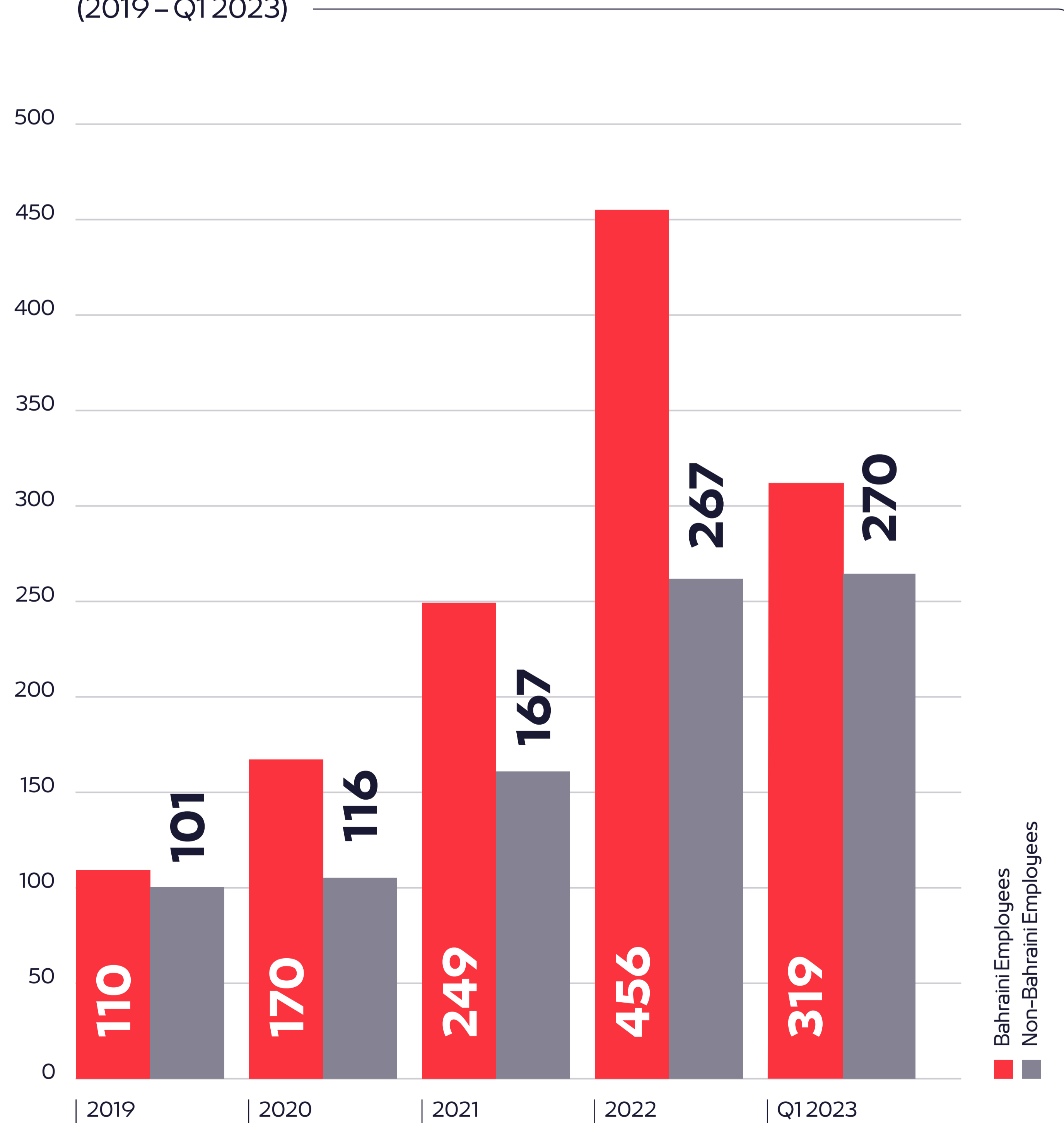
ICT Sector Employment

LMRA, Q1 2023 – BLMI



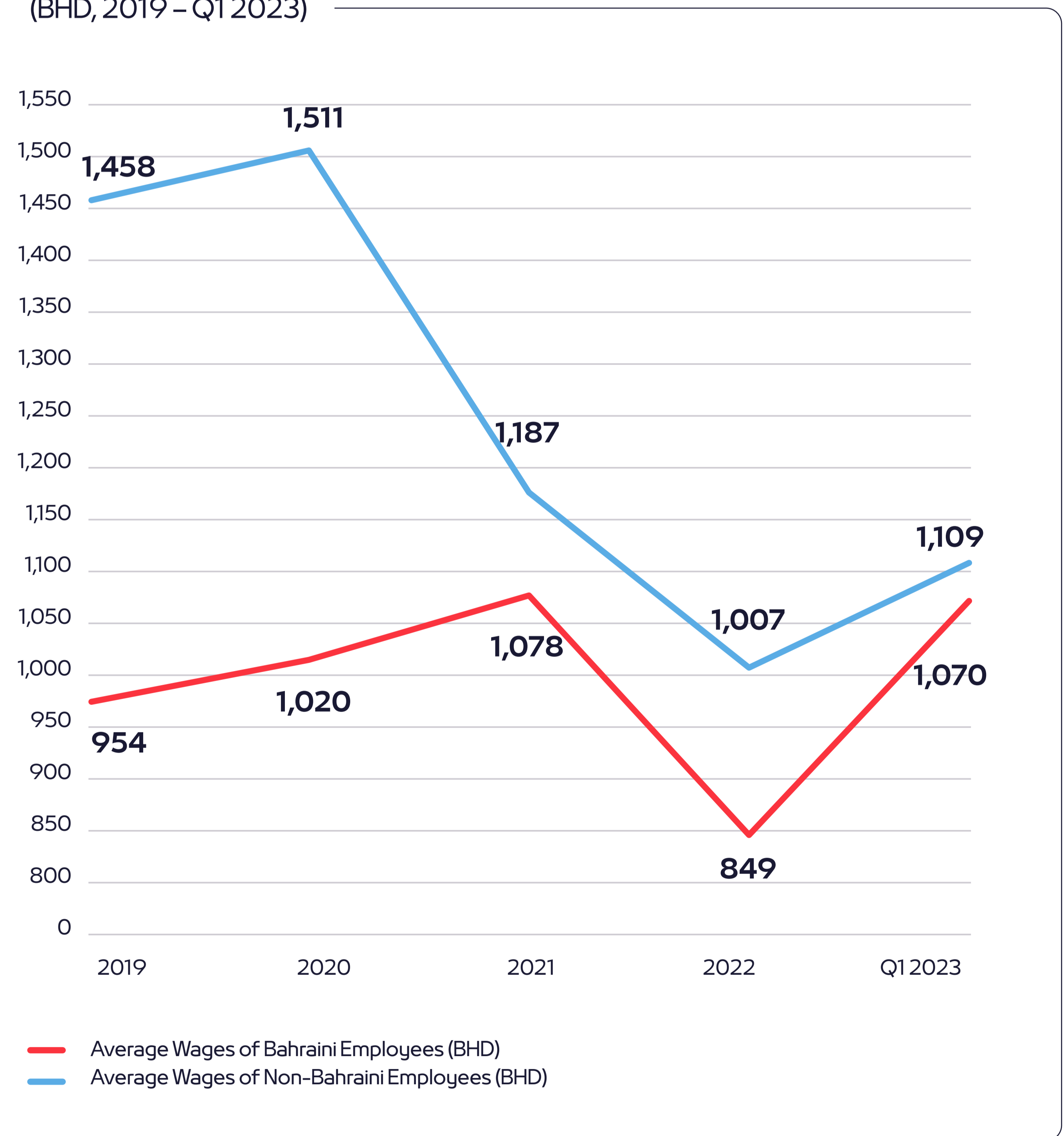
ICT Sector Employees by Citizenship

(2019 – Q1 2023)



ICT Sector Average Wages by Citizenship

(BHD, 2019 – Q1 2023)



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