



هيئة الاتصالات والفضاء والتقنية
Communications, Space &
Technology Commission



GCC Partnership Guidebook



cst.gov.sa

The Digital Cooperation Organization (DCO) is an enabler for a sustainable digital economy for its Member States, including KSA, by supporting responsible E-Waste Management

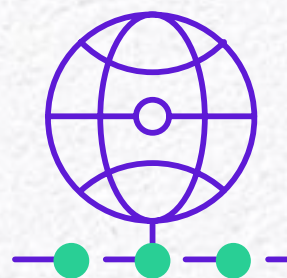
The DCO supports Member States achieve social prosperity and growing the digital economy



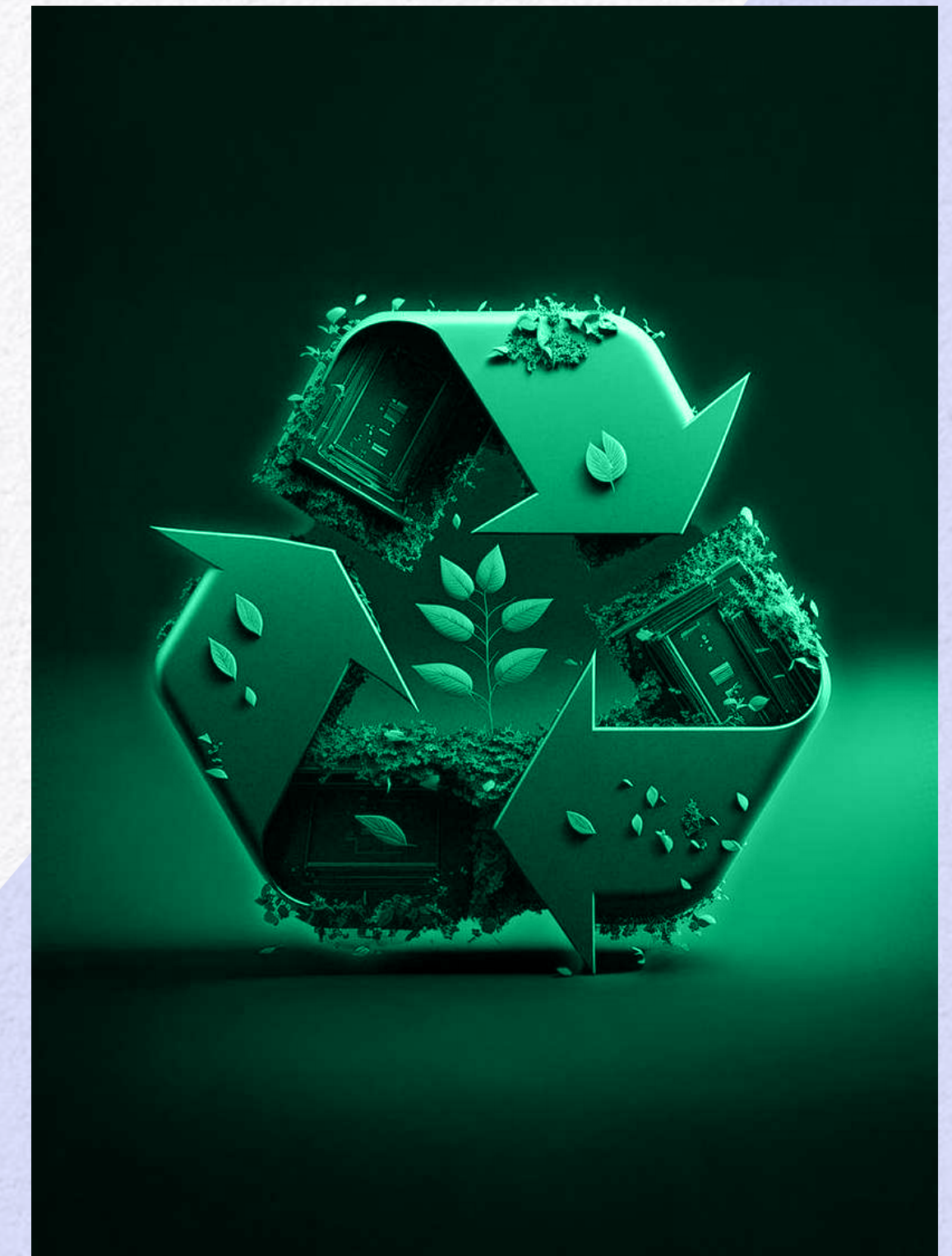
The DCO Strategic Roadmap for 2030, DCO 4-Year Agenda 2025-2028, and DCO Digital Economy Navigator (DEN) are also centered to foster an inclusive, human-centric, and sustainable digital economy using digital technologies



The DCO also aims to enable women, people with disabilities, the youth, and entrepreneurs by giving them the access, skills to benefit from internet and digital technologies



The DCO accelerates collaboration, innovation and cooperation in the digital economies bringing together Member States





The Kingdom of Saudi Arabia, a DCO Member State, is working to advance sustainable development through various initiatives, including the E-waste Management Initiatives

Launched the “Recycle Your Device” initiative to encourage the public sector, businesses and individuals to recycle electronic devices to advance e-waste management in support of the KSA’s Sustainable Development Goals.

CST aims to reduce e-waste, promote social responsibility, and support a circular economy through responsible device recycling.



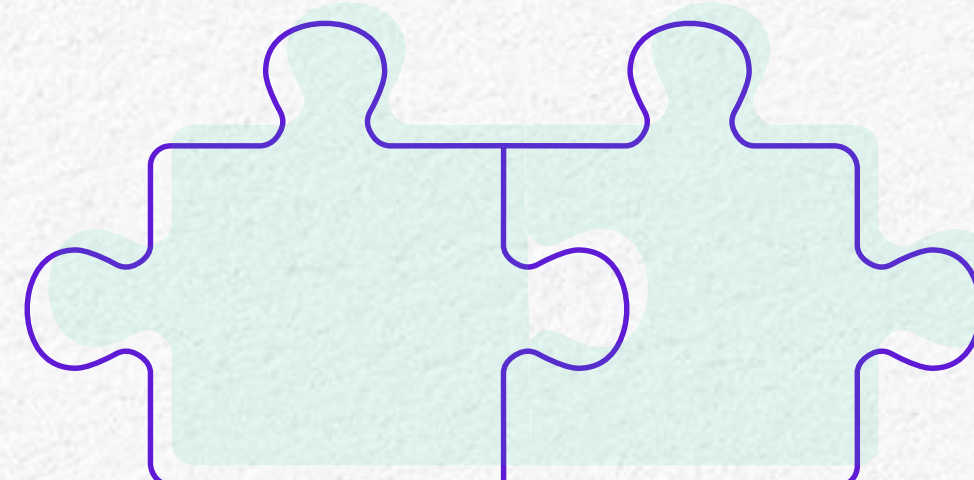
CST’s Initiative
“Recycle Your Device”



CST and the DCO partnered to raise awareness, foster strategic policy dialogue and strengthen cross-sector collaboration on e-waste management to support sustainable digital ecosystems



OBJECTIVE



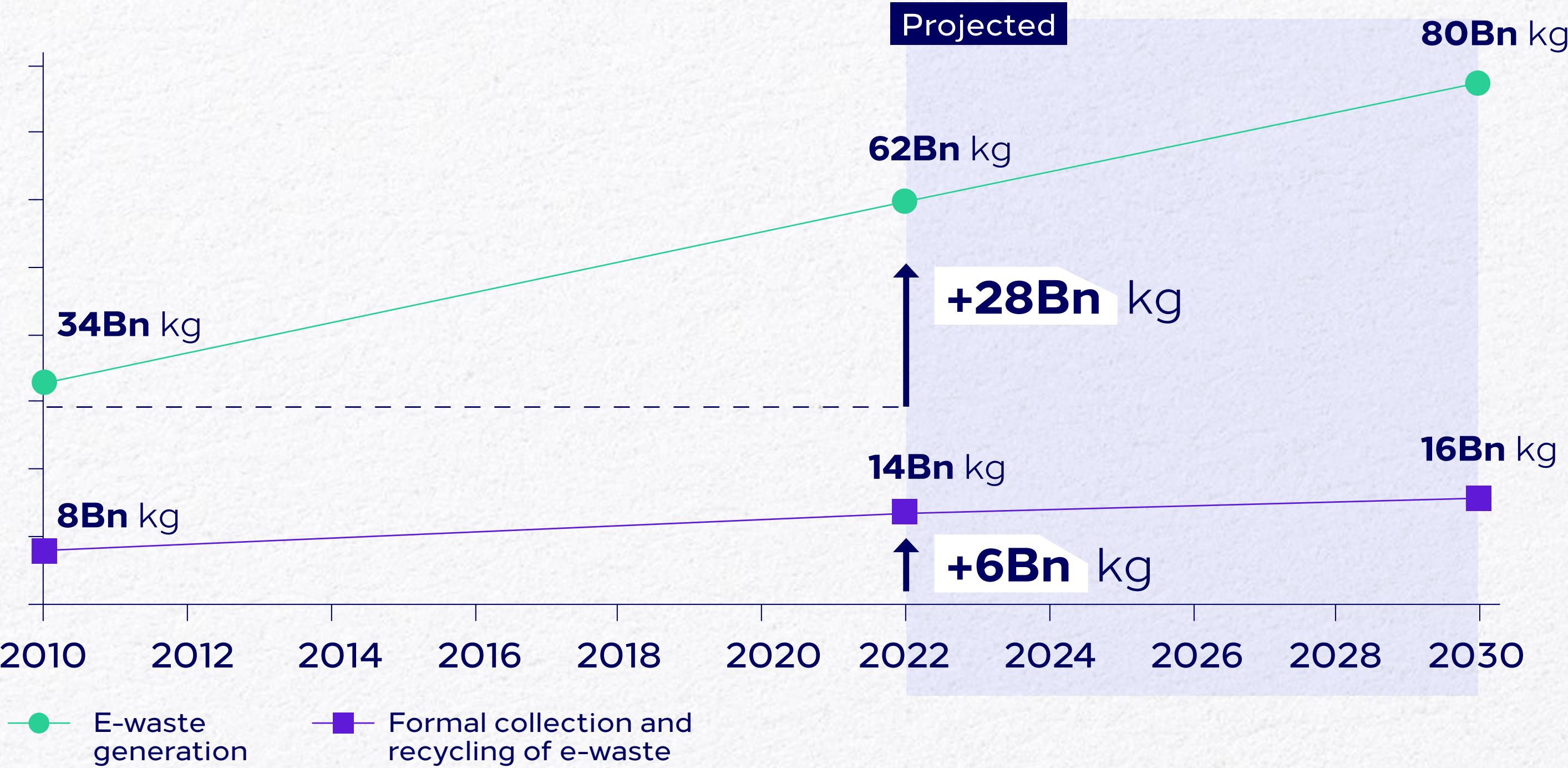
To advance e-waste management by promoting responsible recycling of electronic devices across sectors




E-waste is both a challenge and an opportunity: growing volumes strain collection systems, yet vast economic value remains untapped

E-Waste Growth and Environmental Impact

VOLUMES OF GLOBAL E-WASTE GENERATION, COLLECTION AND RECYCLING [2010-2030]



 E-Waste generation has grown by an average of 2.3 billion kilograms since 2010.

 E-Waste generation is growing five times faster than formal recycling.

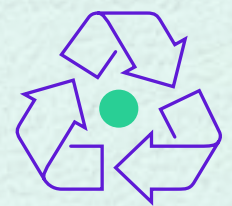


Only **22%** of e-waste is recycled each year, leaving a **\$91 billion** opportunity untapped.

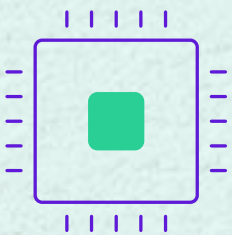
Challenges in E-Waste Management



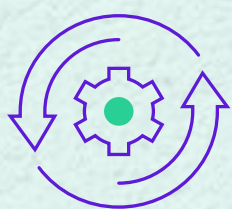
Lack of e-waste specific legislation and/or challenges with **enforcement**.



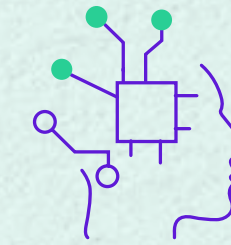
Limited e-waste collection, treatment and recycling **infrastructure**.



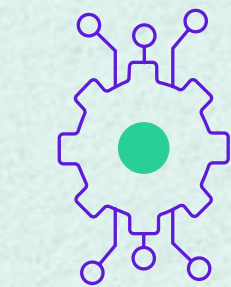
Limited availability of e-waste **data**, and lack of e-waste **tracking system**.



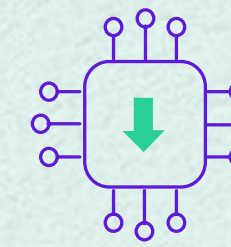
Commercial viability of operating high quality **recycling infrastructure**.



Low Consumer Awareness.



Fragmented Value Chain, with unregulated **informal sector involvement**.



Illegal import of e-waste.

strengthening e-waste management requires assessing current systems and empowering both the private and social sectors.

DCO E-Waste Management Framework

 Differentiating factor

Key Components:

Guiding Principles

Covers The Whole E-waste Value Chain

Considers Both National And Cross-border E-Waste Flows

Desired characteristics

Maps government mechanisms exhaustively across the whole value chain.

Brings together national and cross-border considerations in an integrated framework.

Framework Layers

01 The first Layer of the framework structure is the **value chain, including import and export steps.**

02 The second Layer of the framework is **categories of government-driven mechanisms.**

03 Alongside the framework, **stages for successful implementation** is detailed.

Exhaustive Coverage Of Government - Driven Mechanisms

Looks beyond policies to provide comprehensive coverage of government-driven mechanisms, including capability building and private sector enablement.

Country Agnostic: Applicable To Diverse Contexts

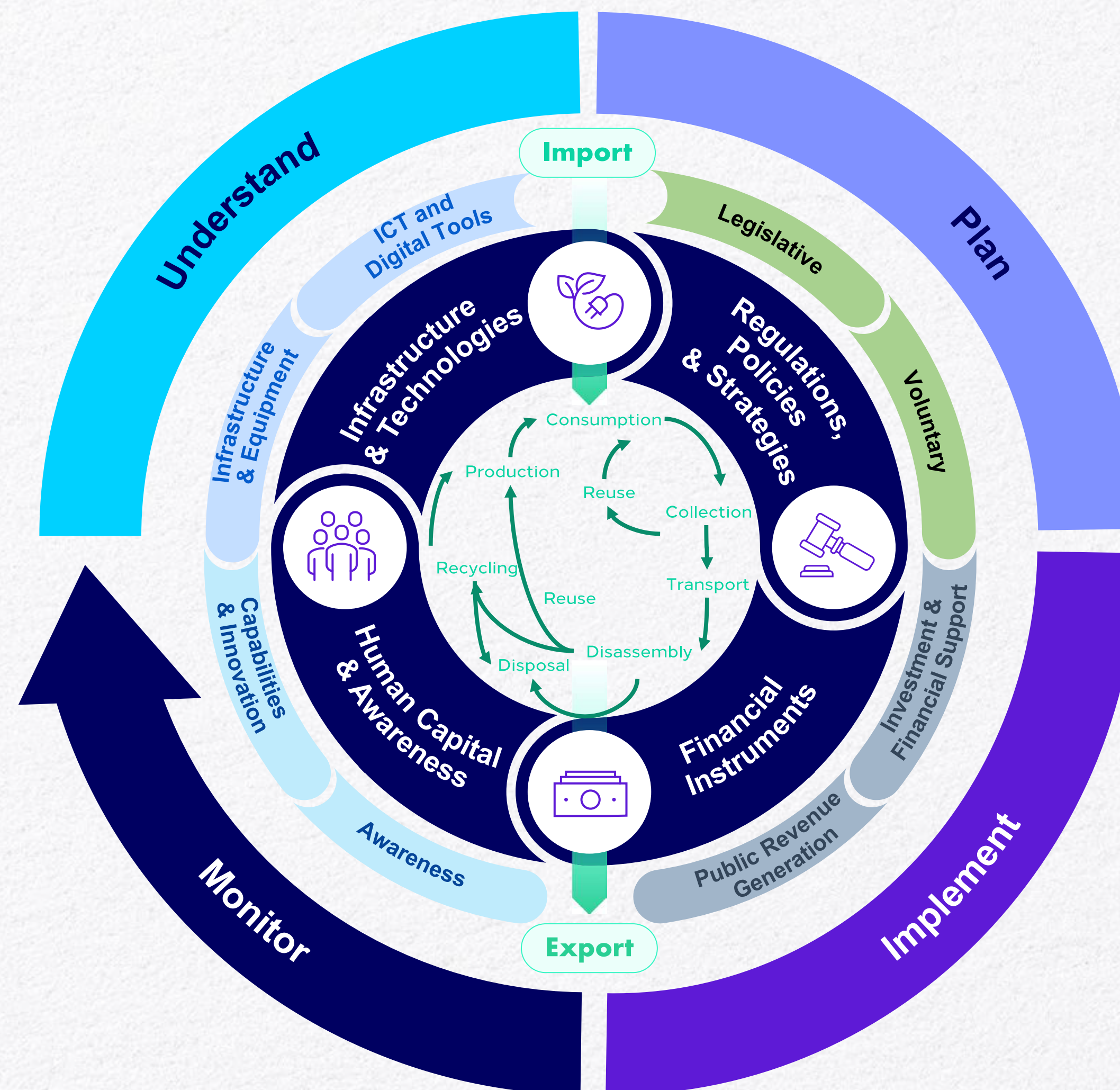
Derives content from best practices and encourages countries to identify relevant mechanisms for implementation based on their current state.

Simple, Practical, And Effective

Clearly structured, including no more than two dimensions to ensure comprehensibility, and provides specific guidance for actioning the framework.

DCO E-Waste Management Framework

“E-Cycle In Action For Governments”



Source: DCO E-waste Management Framework (2024-25)



A Real-World Use Case: “Recycle Your Device” & the DCO E-Waste Management Framework



Aligned Holistic Approach

‘Recycle Your Device’ supports DCO Framework covering the entire E-Waste value chain



Policy Engagement

Promotes stakeholder alignment and voluntary participation within the DCO’s Regulatory, Policy & Strategy Pillar



Infrastructure & Awareness

Boosts recycling infrastructure and public awareness, reinforcing the framework’s human capital and technology pillar

What is Recycle Your Device ?

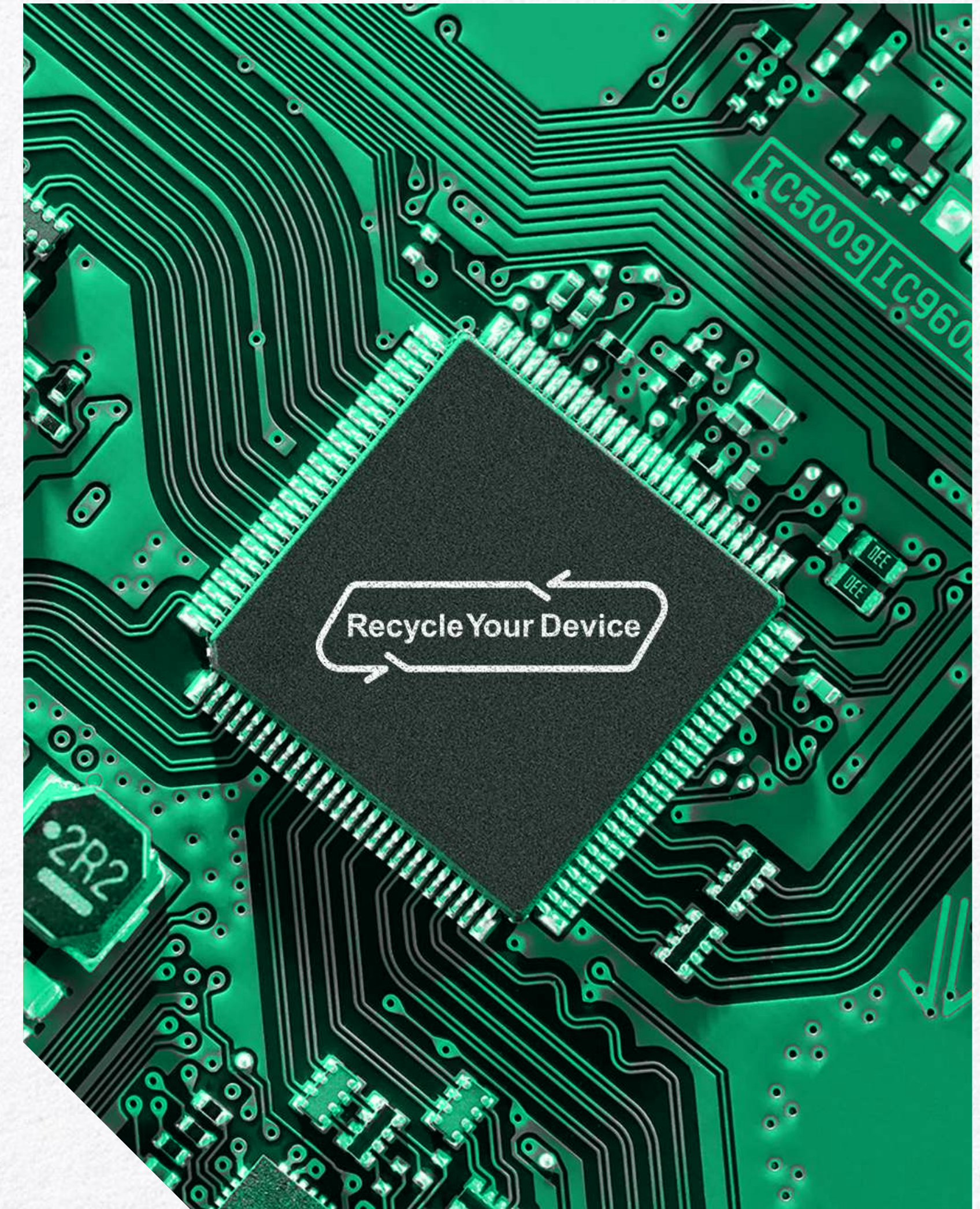
“**Recycle Your Device**” is an initiative designed to encourage governments, businesses, and individuals to recycle their electronic devices.

At the national level, the Communications, Space and Technology Commission (CST), in cooperation with the Ministry of Communications and Information Technology (MCIT), MWAN, and private sector partners, launched the campaign to support the Kingdom’s near- and medium-term sustainable development goals.

CST is working with the Digital Cooperation Organization (DCO) and its Member States, particularly in the GCC, to adapt and replicate the “Recycle Your Device” campaign internationally, aligning with national e-waste priorities.

The initiative has two core objectives:

- 1 Raise awareness among individuals, institutions, and governments about the importance of recycling electronic devices and advancing sustainability.
- 2 Expand partnerships with private sector stakeholders and public authorities to build a broad national and cross-border recycling movement.



MWAN موان
المركز الوطني لإدارة النفايات
National Center for Waste Management



وزارة الاتصالات
وتقنية المعلومات
MINISTRY OF COMMUNICATIONS
AND INFORMATION TECHNOLOGY






هيئة الاتصالات والفضاء والتقنية
Communications, Space &
Technology Commission

➔ What is Recycle Your Device ?

Promoting
Progress on the SDGs



 Economic	<p>Harnessing e-waste economic value by recovering usable materials to support the production of new devices</p>	<p>Reducing financial waste through efficient recycling and raw material utilization</p>
 Environment	<p>Lowering carbon emissions.</p>	<p>Limiting electronic waste to protect the environment.</p>
 Social	<p>Empowering low-income families with access to digital devices.</p>	<p>Creating employment opportunities that support digital inclusion and bridge the digital divide.</p>

➔ Recycle Your Device Initiative: Achievements and Impact



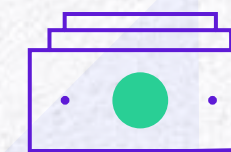
First national initiative

In recycling electronic devices



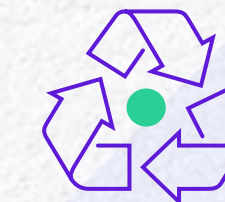
+350K

Collected devices



+105M SAR

Market value of the devices



+840 tons

Recycled or repaired



+150

Charities and schools were supported



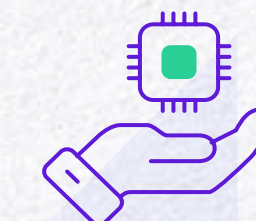
+20K

Individual contribution



26

Visited entities to encourage and rise awareness



37

Entities have made donation of their devices



To expand this impact and lesson learned have been gained on the previous years we developed this guidebook



Scope of the Guidebook

This guide focuses on replicating the “Recycle Your Device” initiative, offering stakeholders clear steps, tools, and best practices to plan, launch, and scale similar campaigns that drive sustainable e-waste management, foster cross-sector alignment, and expand national and cross-border device recycling.



Why the Guidebook Matters

01

Strategic Direction
to Guide Global, Regional and National E-Waste Efforts

02

Operational Alignment
for practical implementation of recycling initiatives

03

Well defined process
to ensure consistent and replicable e-waste management approaches

04

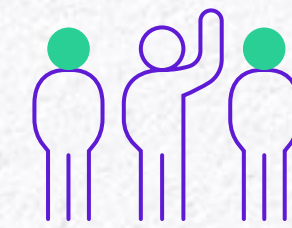
Collaborative action
to foster partnership across stakeholders, including governments, businesses, and society

This guide is targeted to support a national level implementation of device recycling



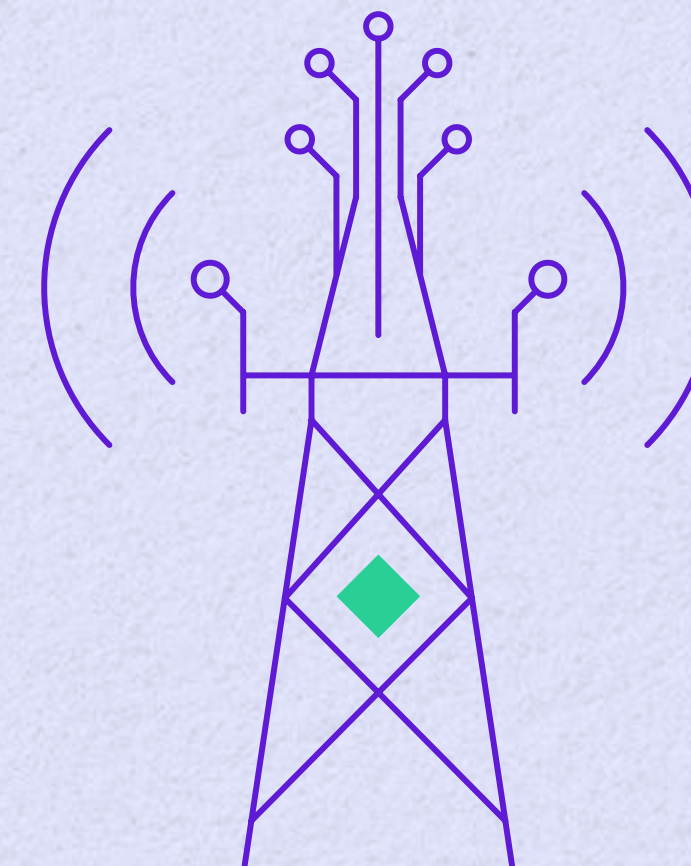
Objectives of the Guidebook

- Equip stakeholders with a practical guide to initiate and implement effective e-waste management programs.
- Foster cross-sector and multi-level alignment on sustainable e-waste management practices
- Support cross-sector collaboration to scale national and cross-border electronic devices recycling efforts.



Guidebook Target Audience

Regulators / Ministries for ICT sector
(Comms & Technology)



→ Pillars of the ‘Recycle Your Device’ Initiative



Step 1: Assessment

1.1 Mapping the E-Waste Landscape

To develop an effective recycling program, it's essential to understand the national landscape:

Stakeholder Mapping:

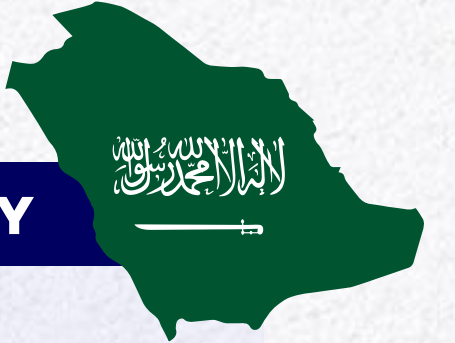
- **Regulators:** Identify all relevant public entities (e.g., ICT regulators, environmental ministries, waste management authorities).
- **Private Sector:** Include telecom companies, e-waste logistics providers, and retailers.
- **Nonprofits and Academia:** Engage with technical universities and sustainability NGOs

Recycle Your Device

Regulators responsible for e-waste:

- **MWAN:** National center for public sector waste-management
- **MCIT and CST:** Public ICT sector regulators
- **Ertiqat:** non-profit organization for device repair services
- **Atta Digital:** Non-profit initiative to raise public awareness
- **Sirc:** Private sector e-waste management organization
- **Eg.DHL, STC, Jahez, Zain, Mobily, SMSA:** Delivery and logistics services partners

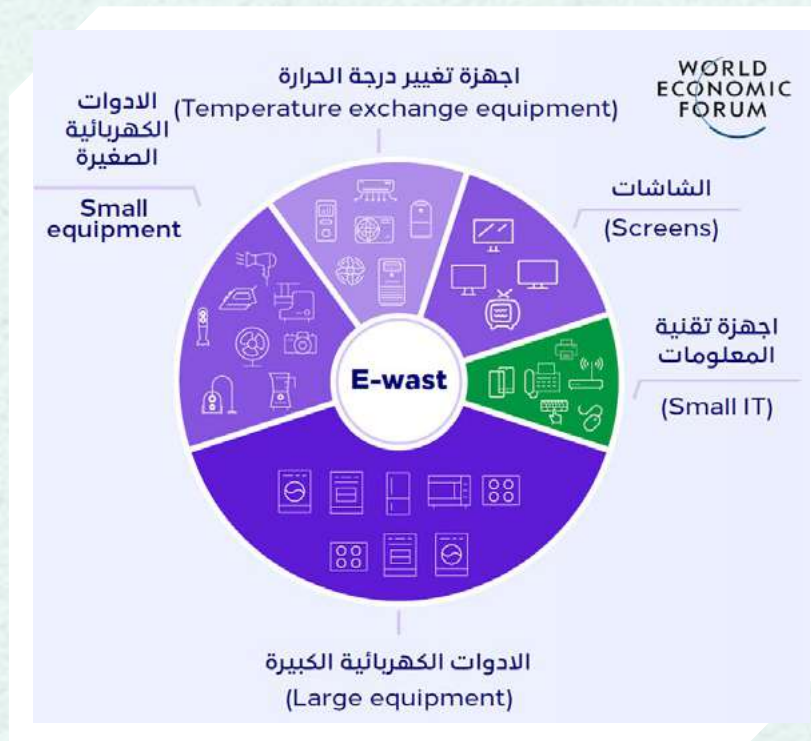
CASE STUDY



Step 1: Assessment

1.2 Methodology

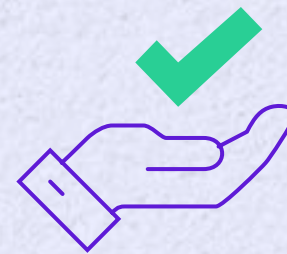
Targeted Device Categories:



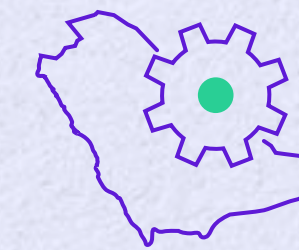
Assessment Methods:

- Surveys and focus groups to understand user behavior.
- Use of digital platforms (e.g., national portals) to track preferences and engagement.
- Geospatial mapping to identify underserved areas.

Recycle Your Device

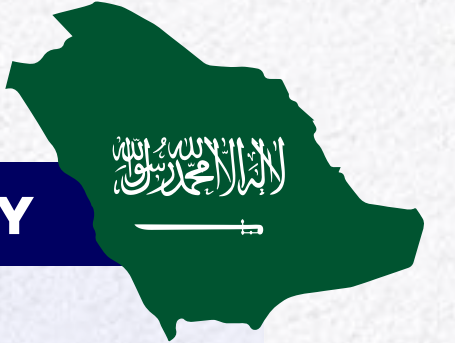


The initiative identified target groups, including individuals and businesses, prioritized focus areas and evaluated service accessibility across cities.



For the KSA implementation, small IT devices, such as mobile phones, landline telephones, computers, modems, and printers, were chosen for their ease of repair, straightforward handling, and strong potential for reuse.

CASE STUDY



Pillar 2: Planning and governance

2.1 design the process

Design a citizen- and business-friendly process

Access Channels:

- Drop-off points at retail stores, government buildings, and telecom centers.
- Scheduled home pick-up services.
- Smart kiosks with automated incentives (recommended enhancement).

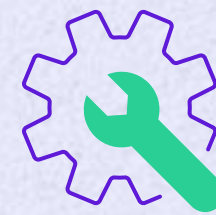
Digital Integration:

- Develop or localize a unified mobile/web portal for all services.
- Include features such as real-time tracking, incentive management, and educational content.

Customer Journey Optimization:

- Ensure simplicity from registration to certification.
- Provide multilingual support.

Recycle Your Device

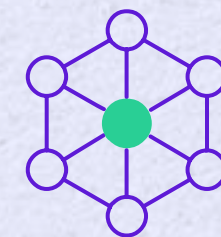


Device handling options:

Drop-off: devices can be delivered to a designated collection points of partners

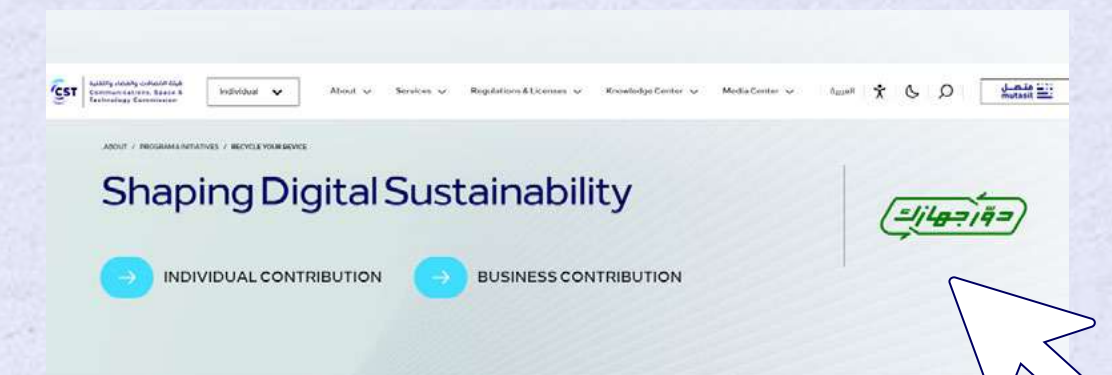


Pick-up: home collection service is provided in collaboration with delivery partners (Eg. Jahez, SMSA)

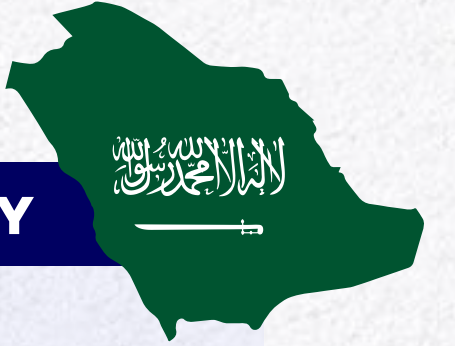


Digital integration

A national portal was developed under CST official platform



CASE STUDY



→ Pillar 2: Planning and Governance

2.2 Roles and Responsibilities

Stakeholder		Role
Designated waste Authority	>	National oversight and policy integration
ICT Regulator	>	Sector mobilization, coordination, and awareness
Non-profit Partner	>	Device assessment, repair, and donation
Recycling Entity	>	Responsible for device destruction and certification
Private Sector	>	Logistics and drop-off services



- > **Central Governance and Oversight:** CST and MWAN
- > **Digital Infrastructure:** digital platform is developed by CST to manage user interaction
- > **Targeted Segments:** Business and Individuals
- > **Collection and Logistics Partners:**

Drop-off Points: Provided by telecom operators and Riyadh Bank (e.g., STC, Mobily, Zain)

Pick-up Services: Supported by logistics partners (e.g., Jahez, SMSA)

- > **A non-profit partner (Ertiqā):** for individuals and business registration, including the Device assessment, repair, and donation process
- > **Recycling entity (Sirc):** Unrepairable devices is transmitted to sirc to handle the device destruction process

Pillar 2: Planning and governance

2.3 Develop the guide line

Develop a governance framework to ensure program scalability, transparency, and trust:

Standard Operating Procedures (SOPs):

- Define handling, collection, and transportation protocols.
- Include device testing, data wiping, and quality checks.

Legal and Regulatory Alignment:

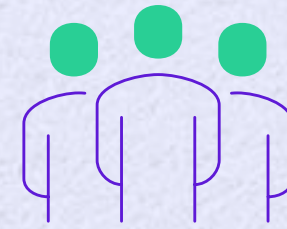
- Ensure compliance with e-waste and data protection laws (ex: following GDPR or national data protection laws, waste management national framework, ..etc)

Risk Mitigation Measures:

- Address collection inefficiencies or low public participation.

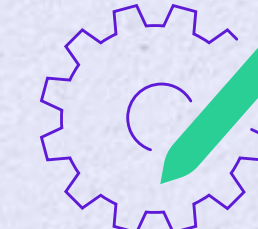
Recycle Your Device

Developed a “Device Donation Manual”



Guidance for business

Click here to access the full Device Donation Manual for Individuals

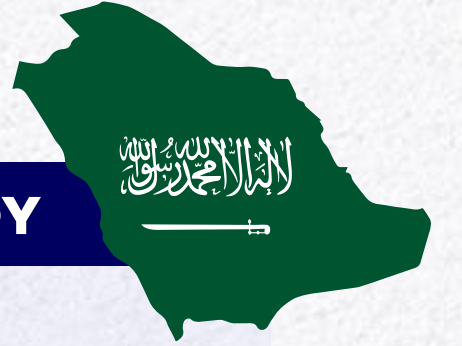


Guidance for individuals

Click here to access the full Device Donation Manual for organizations



CASE STUDY



Pillar 3: Implementation

3.1 National Portal and Digital Access

Develop a National Portal

Two Tracks:

- Business Track: For companies to recycle in bulk.
- Individual Track: For residents donating or recycling.

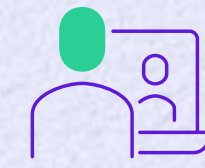
Include features like:

- Device registration
- Pickup/drop-off scheduling
- Real-time status updates
- Digital certificate issuance

Mobile App Integration (Optional)

- Provide convenience for users to track donations and receive digital incentives.

Recycle Your Device



National informative portal:

- CST launched the portal to guide users through the recycling process that outlines delivery options
- Once the option is selected, the user is redirected to the partner's page to complete the request



Branch drop-off option:

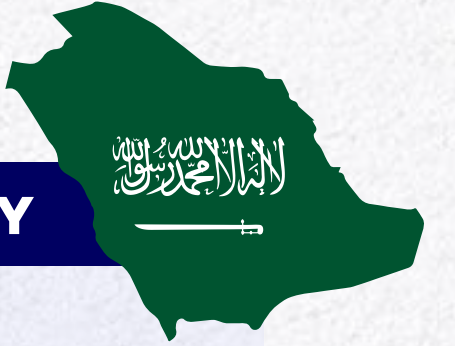
- a map linked to Google Maps aiding users in navigating the drop-off journey



Pick up - option:

- a map is provided to users by partners to track their devices and requests status

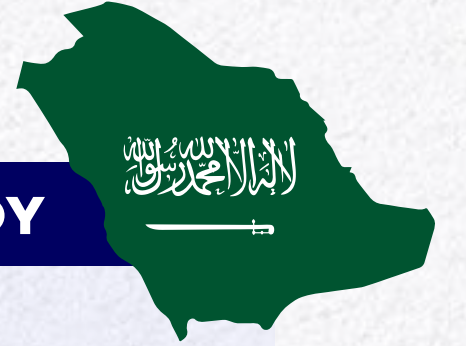
CASE STUDY



Pillar 3: Implementation

3.2 Logistics and Collection Models

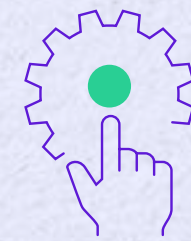
CASE STUDY



Recycle Your Device

Flexible Collection Channels

- **Drop-off Points:** Partner with logistics providers (e.g., DHL) to offer accessible collection hubs.
- **Home Pickup:** Enable scheduling for home/office collections for large quantities.
- **Events-Based Collection:** Temporary stations during national events or sustainability weeks.



KSA has developed multiple collection and logistics models

01

Drop-off points: for individuals has been strategically utilized and selected to maximize reach (Eg. STC,Zain,DHL)

02

Home pickup: requests via delivery partners (Eg. Jahez, SMSA)

03

Events based collection: the initiative participate in public events (Eg. Leap conference) where a branded booth is setup for visitors to donate devices and invitations are extended to organizations and employees to encourage donation.

Pillar 3: Implementation

3.3 Incentive Mechanisms

Digital Rewards Program

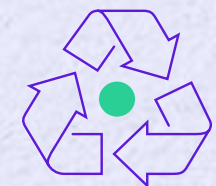
➤ Encourage participation through:

- Points redeemable at retail partners
- Telecom discounts
- Certificates of contribution (especially for students and CSR reporting)

Gamification & Recognition

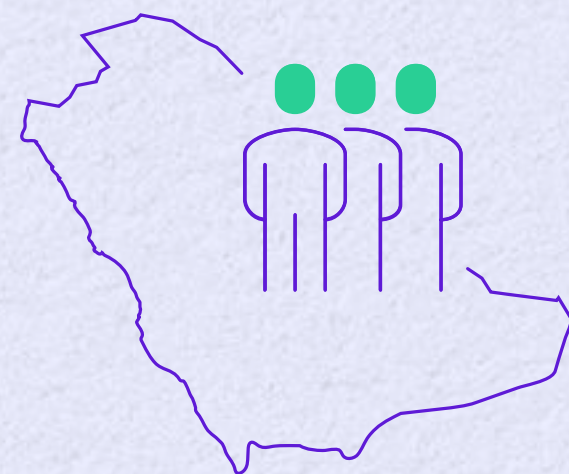
- Rankings by city/school/organization
- Public recognition of top contributors

Recycle Your Device



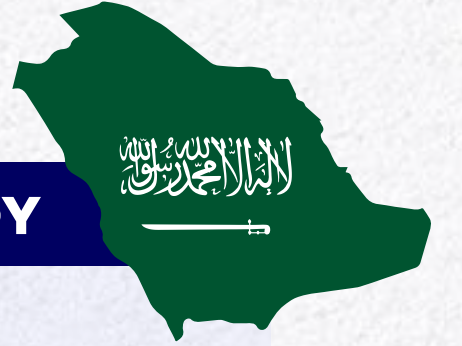
Digital Rewards

Individuals who contribute on recycling or donation are rewarded by partners



Saudi Arabia digital Reward System for individuals

CASE STUDY



خلال
24 ساعة

اشتراك برايم لمدة شهر

jahez

خلال
24 ساعة

خصومات بقيمة 100 ريال

stc

خلال
24 ساعة

5 جيجا بايت

LEBARA

خلال
19 يوم

1000 نقطة في برنامج حصاد في تطبيق
بنك الرياض

بنك الرياض
Riyad Bank

خلال
24 ساعة

20 جيجا بايت بيانات مجانية

سلام

خلال
24 ساعة

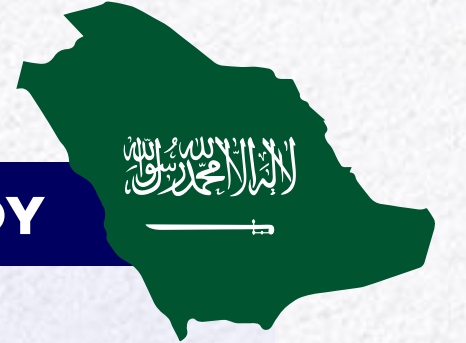
جو خصم 100 ريال

GO
للاتصالات

Pillar 3: Implementation

3.4 Partnerships and Agreements

CASE STUDY



Recycle Your Device

Define Implementation Partners

- **Nonprofits:** Repair and donation
- **Recyclers:** Certified destruction
- **Private Sector:** Logistics and communication
- **Government:** Awareness campaigns and policy support

Sign MOUs

- To clarify roles, responsibilities, and data-sharing agreements



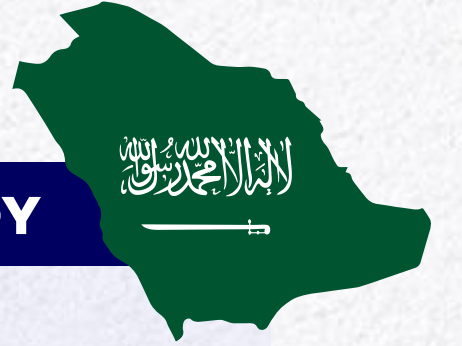
In KSA intersections between partners where defined and signed by agreements

- Memorandums of Understanding (MOUs) were signed between CST and key implementation partners to define roles and responsibilities clearly
- Delivery apps intersects with the recycling company to manage pickups. A process was agreed upon for submitting requests from the delivery app's warehouse, including expected timelines and approved forms between both parties
- Coordination between the repair and recycling entities to agree upon the transfer of non-repairable devices, including weight measurements and the donation value per ton
- Agreement between drop-off point entities and the recycling company to coordinate pickup schedules from branches and related logistics

Pillar 3: Implementation

3.5 Communication and Awareness

CASE STUDY



Recycle Your Device

Awareness campaigns

- Use digital and traditional media to promote:
 - Environmental benefits
 - How to participate
 - Success stories

Targeted Messaging

- **Schools:** Emphasize education and competition
- **Corporates:** Focus on ESG/CSR value
- **General Public:** Simplicity and rewards

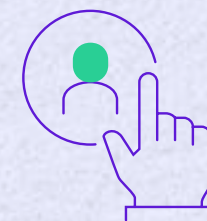
Toolkits for Partners

- Provide ready-to-use social media content, posters, and FAQs



Raising Awareness through:

- Spreading promotional content through digital media
- Collaboration with partners to ensure unified promotional content
- Integration of an FAQs section via initiative's website
- Activation of CST's call center to assist users regarding the initiative



To reach out for infographics

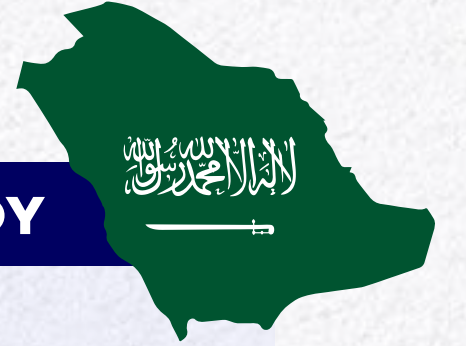
Click here



Pillar 3: Implementation

3.6 Certification and Reporting

CASE STUDY



Recycle Your Device

For Individuals:

- Receipt + digital certificate of contribution

For Organizations:

- Certificates of participation
- Impact reports summarizing:
 - Number of devices
 - Weight/volume
 - Environmental benefit (e.g., CO₂ saved)

Refurbishment reporting for organizations:

- Participated organizations will receive Certificate and Receipt from 'Ertiqa'
- A report on the recipient organizations of the donated devices



SMSA

- Provides Ertiqa with donation receipt and a certificate of appreciation acknowledging the donor's contribution



Recycling reporting for organizations

- A report on recovered materials quantities and estimated CO₂ emissions reduction is provided to the organization from recycling entity 'SIRC'
- Participated organizations will receive two Certificates issued by the Recycling Entity 'SIRC'



Certification and reporting for individuals

- Certificate of acknowledgment for device refurbishment donation
- Jahez: provides a digital receipt of recycling to donors upon device pickup



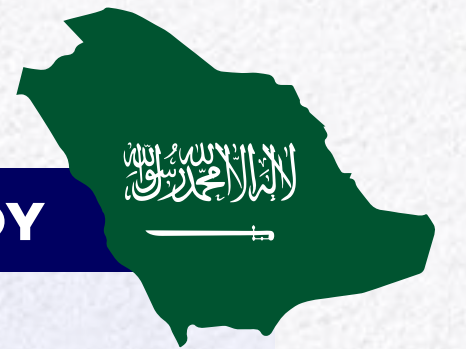
Pillar 4: Monitoring and refining

4.1 Key Performance Indicators (KPIs)

Area	Suggested KPIs
01 Environmental Impact	<ul style="list-style-type: none">• Tons of e-waste collected• CO₂ emissions avoided• % of devices reused vs. destroyed
02 Participation	<ul style="list-style-type: none">• # of individual contributors• # of organizations enrolled• Drop-off point utilization rates
03 Awareness	<ul style="list-style-type: none">• Campaign reach and engagement• Social media mentions• Surveyed awareness levels
04 Process Efficiency	<ul style="list-style-type: none">• Average time from collection to certification• Portal uptime and user satisfaction• % of devices with data wiped properly

Recycle Your Device

CASE STUDY



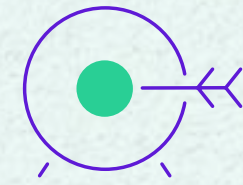
To mentor performance KSA Has:

- Developed a unified mechanism for collecting performance data from stakeholders
- Implemented weekly reporting cycles to track KPIs of the initiative



Pillar 4: Monitoring and refining

4.2 Refinement Cycles



Annual review sessions
with all stakeholders to evaluate performance and realign goals.



Iteration roadmap

- > **Version 1:** Pilot and adapt
- > **Version 2:** Expand and standardize
- > **Version 3:** Automate and regionalize

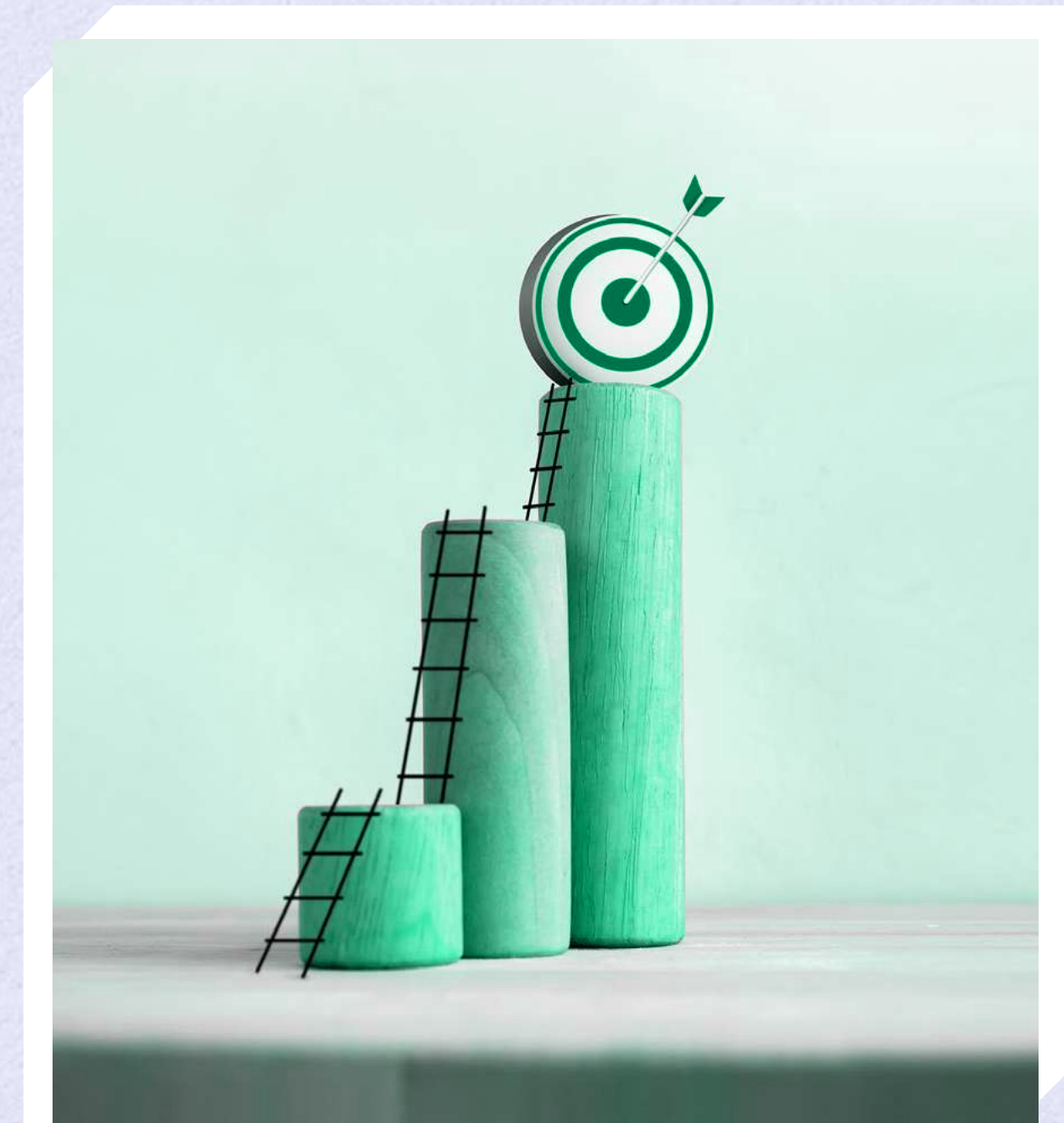
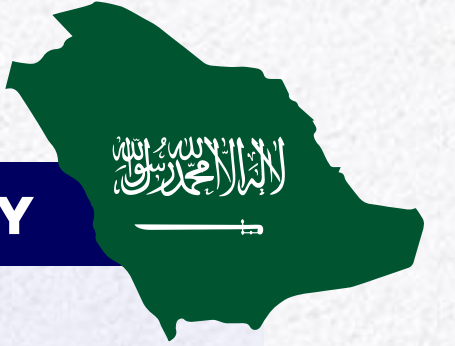
Recycle Your Device



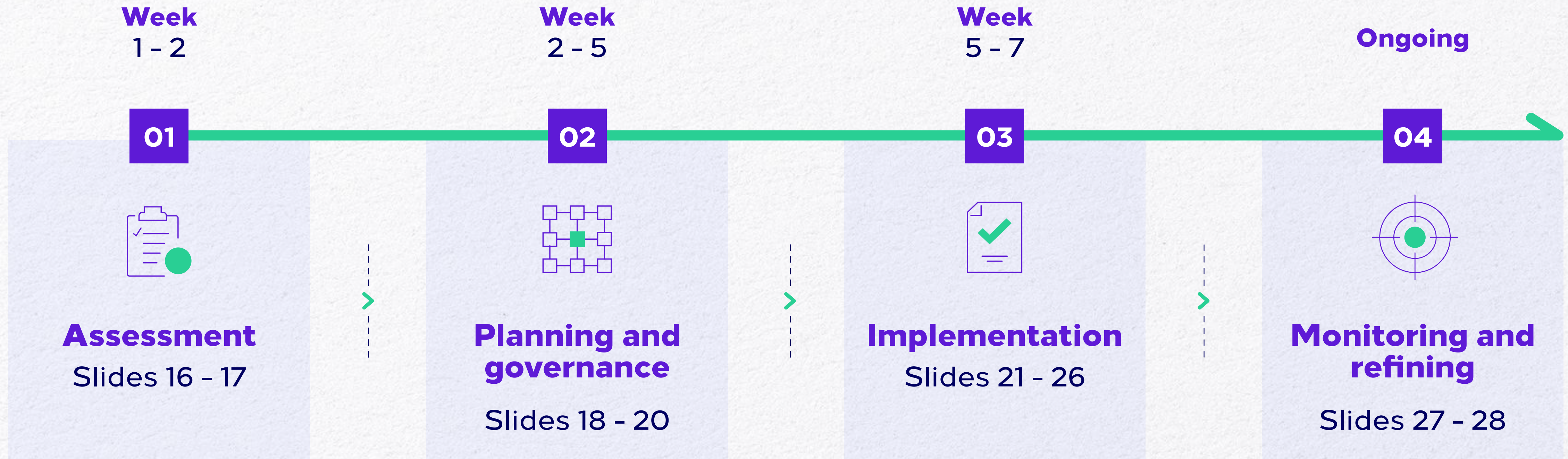
KSA has applied a phase approach initiative:

- > **Version 1** (2022–2024): Tested collection models, partnerships structure, and awareness strategies
- > **Version 2** (2025 onward): Focused on scaling and standardizing based on data insights from the first launch based on KPI results and consumers feedback (e.g., user preferences, success rates and lesson learned)
- > **Vesrion3**: Insights from previous versions informed and allowed for collaboration (Eg. GCC-wide framework presented today)

CASE STUDY



➔ This guide can be implemented in four steps over an eight-week period



Future outlook

The Recycle Your Device initiative is more than a campaign, it is a foundation for sustainable digital future.

As we look ahead, the goal is to **move from isolated efforts to a unified regional movement** that embeds e-waste recycling into national culture, digital policies and economic planning. The GCC has the opportunity to lead globally by turning digital waste into digital value, economically, socially and environmentally.