Blockchain Based YTU Greenstars Certification Program for a Better Solution in Sustainability

YILDIZ TEKNİK ÜNİVERSİTESİ 1911

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GreenStars

GreenStars

GreenStars is a program which environmental, social and economic sustainability is evaluated, encouraged and rewarded with a systematic, comprehensive and holistic approach in all areas that can contribute to sustainable development, such as the public, education, residential units, as well as the production, service and construction sectors.

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“Leave No One Behind”

The Necessity for a Platform

Maintaining International Competitiveness

Paris Climate Agreement, which aims to keep the global temperature rise below 2°C as much as possible.

Publication of the European Green Deal, aiming for a climate-neutral Europe by 2050

Shaping all country policies, especially trade and industry, on the basis of green transformation

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The Necessity for a Platform

- It requires multidisciplinary studies of Engineering Sciences-Social Sciences-Educational Sciences.
- Evaluating the performance levels of stakeholders on the basis of 17 SDGs,
- Comparing applications on a global scale
- In order to evaluate the achievements within the framework of objective criteria,

The **GreenStars Platform,** where Turkey's first domestic standards were created, was established.

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3 BASIC PRINCIPLES OF SUSTAINABILITY

There are basically three principles in the field of corporate sustainability.

- **ECONOMIC**
- **SOCIAL**
- **ENVIRONMENTAL**

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Sustainable Development Goals

Rating

The organization-based percentages of the program prepared by the United Nations in line with the 17 SDGs are determined and reported.

SDG

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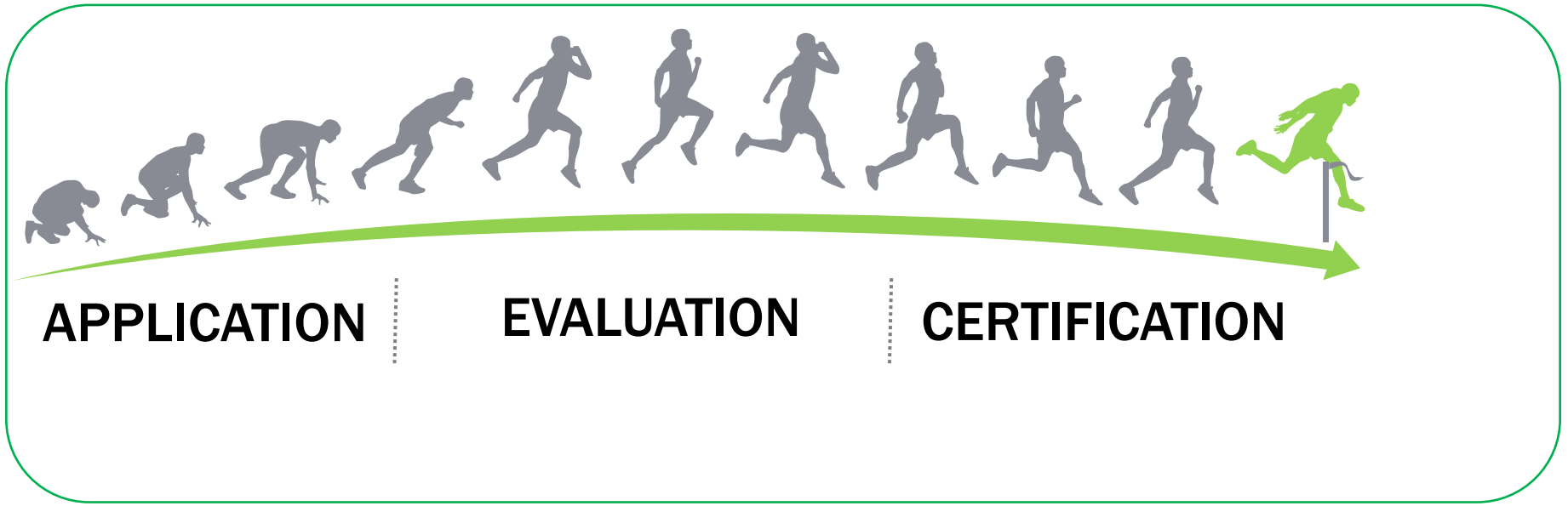
GreenStars PLATFORM – MAIN PROCESSES

Blokchain Infrastructure



End-to-End Monitoring and Control

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Blokchain Infrastructure

1. Traceability
2. Smart Contracts
3. Global Reach
4. Quality Assurance
5. Financial Transactions
6. Cost Advantage

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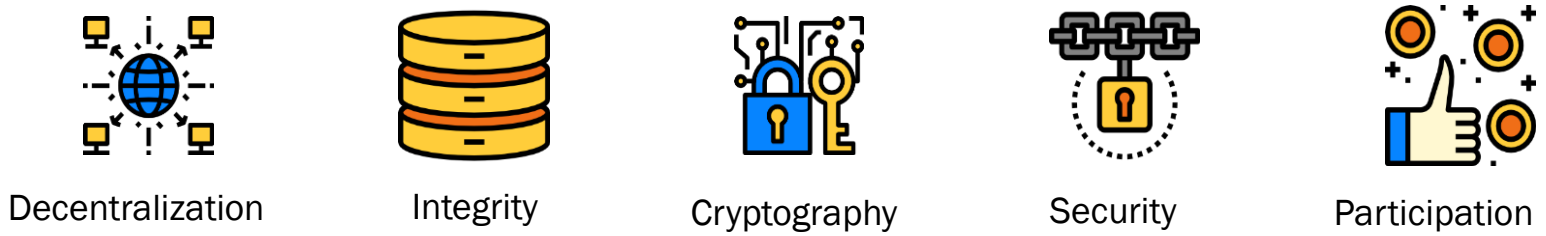
What is Blockchain?

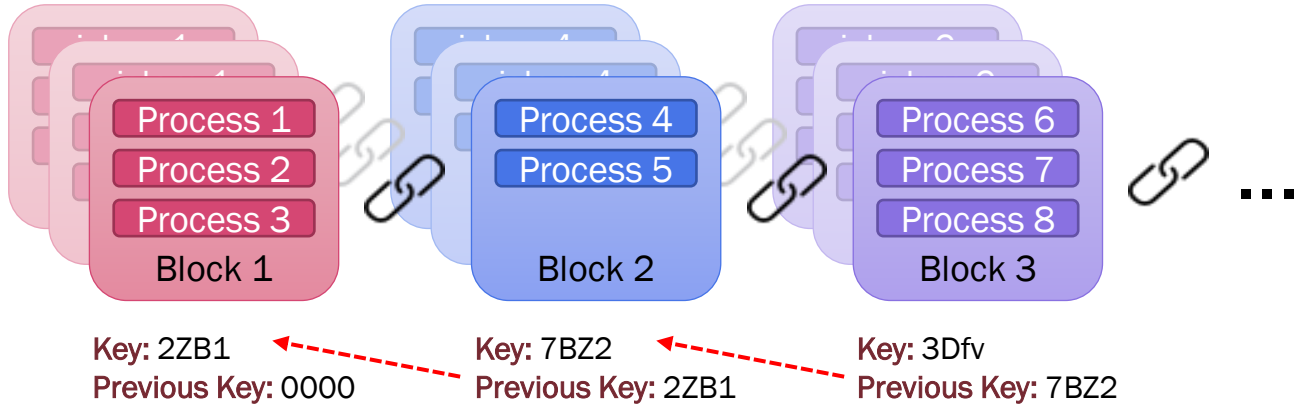
Blockchain is a technology that provides secure transaction recording and tracking on a network of multiple participants.

Records on Blockchain:

- Shared with all participants
- Confirmed by all participants
- Cannot be changed
- Cannot be deleted



How?



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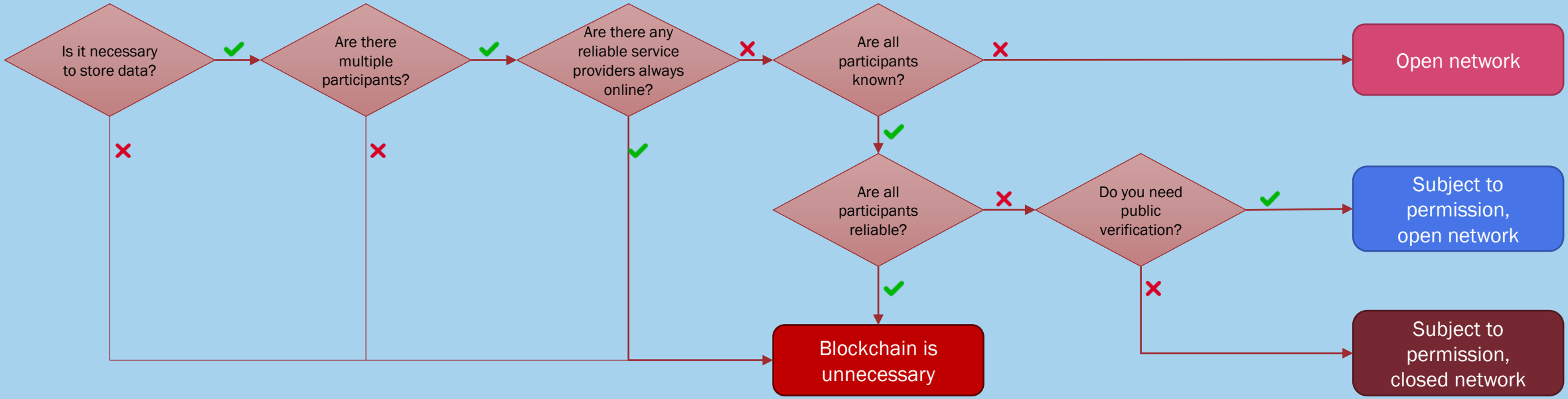
Blockchain Network Structure Requirements

- Operational efficiency
- Simplifying processes
- Active control
- Less risk
- Faster reconciliation
- Service continuity
- Transparency

Appropriate Blockchain network type assessment



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Industries and areas that will be affected by Blockchain

Supplier Chain

Energy

Public

Finance

Education

Health

Transportation

Associations

Identity

Textile

Real estate

Industry

TÜBİTAK

According to TÜBİTAK's 1st Blockchain Workshop Report, the general application areas of blockchain are as follows: :

Banking
FinTech
Money Transfers
Creating and Storing Valuable Documents
E-Commerce and Payments
Stocks and Exchanges
E-Notary Person-to-Person
Borrowing and Distributed Loan Systems
Donation Systems and Micropayments
Cloud Computing and Secure Cloud Storage

WorkFlow Scheme

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Web Page

www.greenstarscertification.com

All documents and documents required for YTU GreenStars Certificate are available on the designed web page. In order to start the certification process, a user account is created on the web page on behalf of the institution.

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Declaration of Compliance

Declaration of Conformity

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Who Can Be on the Sustainability Commission?

- Senior executives of the company
- Experts in the field of sustainability
- Human Resources Specialists
- Engineering Disciplines
- Quality Managers
- Chief Inspectors
- Occupational Health and Safety (OHS) Experts
- Strategic Planning Experts
- Sociologists, Psychologists

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Evaluation Criteria

Questions will be answered under 7 main headings.

- Infrastructure
- Information Education Organization
- Environmental Management
- Administrative Processes
- Human Resources
- Social
- Management Systems

There are **196 questions** that are expected to be answered.

Answers from the **last two years** will be required.

The answers to these questions will have an impact on the

Sustainable Development Goals.

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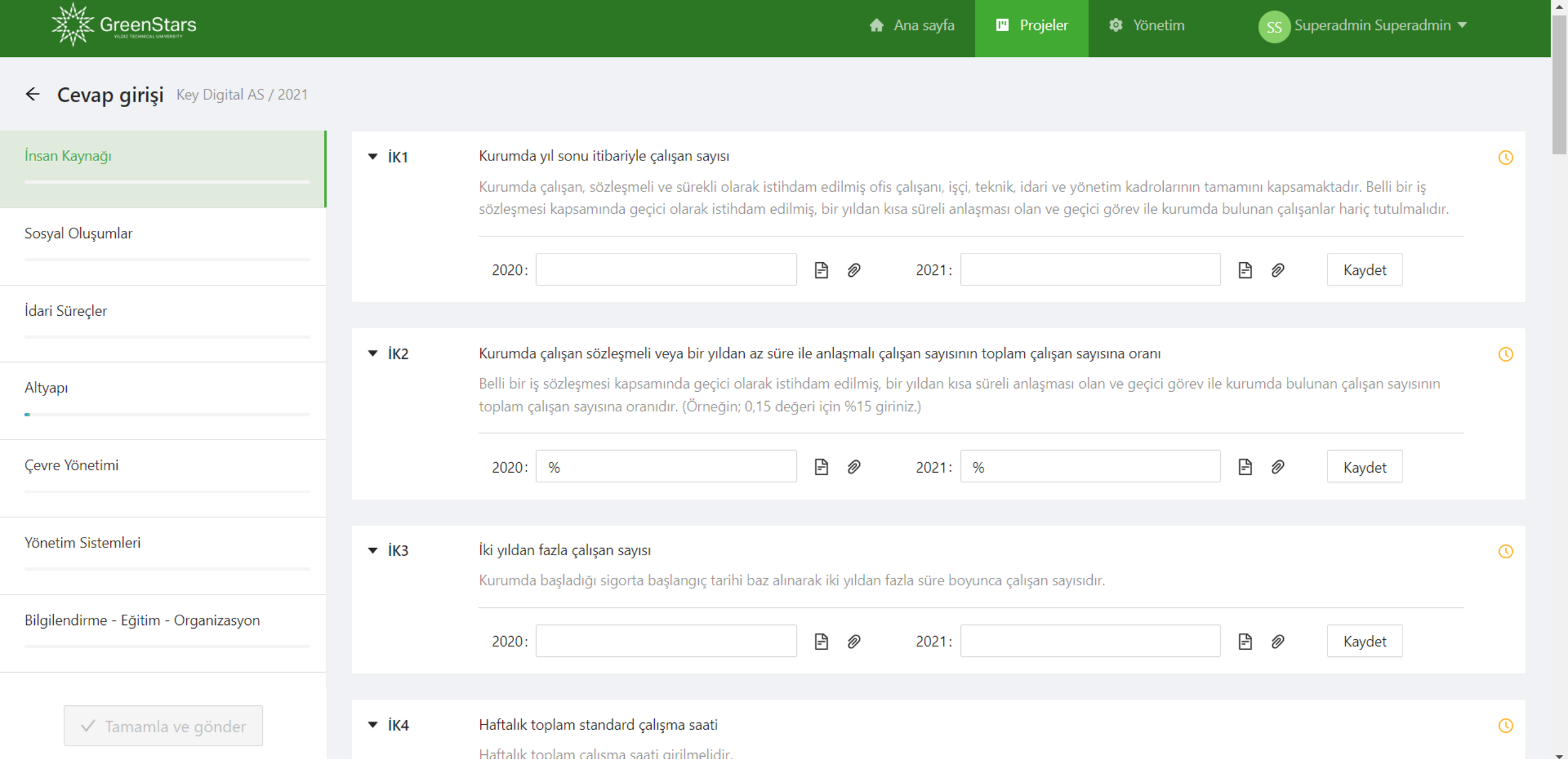

Data Entrance System

1-Day Field Inspection

Evidence Document Control

Field Control

Certification

Reporting the Inspection

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CERTIFICATION

If at least **4 SDGs** are met

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GREENSTARS SERTİFİKASI

Sertifika No	: 019/SFq420
İlk Belgelendirme Tarihi	: 08.12.2020
Basım Tarihi	: 08.12.2020
Geçerlilik Tarihi	: 07.01.2021
Revizyon Tarihi / No	: 08.12.2020/00

RoyalCert International Registrars, kuruluşun değerlendirildiğini ve ilgili standardın gerekliliklerine uygun olduğunu onaylar.

SÜRDÜRÜLEBİLİR AIRLINE

TURKISH AIRLINES

TURKISH AIRLINES

Tayakadın, İstanbul Havalimanı No: 1

Yukarıda belirtilen organizasyonun
SDG PROGRAMI KAPSAMINDA
gerekliliklerine göre değerlendirildiğini ve gerekliliklere uygun olduğunun tespit edildiğini beyan ederiz.

SUSTAINABLE DEVELOPMENT GOALS

ROYALCERT

YTÜ YILDIZ TEKNOPARK

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SUSTAINABLE DEVELOPMENT GOALS EVALUATION REPORT

Institution activities are evaluated under 17 SDGs.
The following SDG OVERALL SCORE calculation is made according to the % scores of the SDGs.

SDG OVERALL SCORE CALCULATION FORMULA

17 AMAÇLARİÇİN ORTAKLIKLAR + A + B + C

%22 + %26 + %26 + %26 = %100

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ROYALCERT

ASAŞ

çedbik

DEVA

DEVLET HAVA MEYDANLARI İŞLETMESİ

ER METAL

EROĞLU

GYODER

HALKBANK

T.C. İSTANBUL VALİLİĞİ

LC WAIKIKI

SEZGİN GROUP

SILVERLINE

TURKISH AIRLINES

Türk Telekom

TÜROB

Türkiye Oteciler Birliği

Hotel Association of Turkey

TURYİD

TURİZM, RESTORAN YATIRIMCILARI VE GASTRONOMİ İŞLETMELERİ DERNEĞİ

UCLG

United Cities and Local Governments

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Be a Star in Sustainable Future!

www.greenstarscertification.com

YTU- Davutpaşa

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