



**AL DHAFRA  
RECYCLING  
INDUSTRIES**

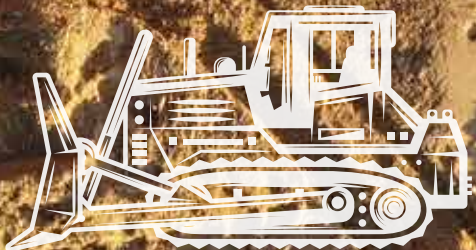
In partnership with Tadweer

## COMPANY PROFILE











## Welcome

The importance of Construction and Demolition Materials Recycling field lies in keeping the environment clean and preserve our natural resources as reusing construction and demolition waste can save much energy and prevent carbon emissions by tenfold saves energy and reducing landfill waste.

Energy Savings: Recycling saves large amounts of energy, and in general it decreases the consumption of natural resources to produce new materials, help reduce your carbon footprint, and mainly helps reduce the need for harvesting raw materials

Within this profile pages we will give you a tour in this work field and how we can help you achieve these results







• Welcome to Our Journey .....	05
• Managing Head .....	08
• Who We Are? .....	10
• Our Partner .....	12
• Why Us? .....	14
• World orientation towards sustainability and net zero .....	16
• Our Work & Sustainability .....	17
• Our Work & Accreditations .....	20
• Location Map .....	21
• ISO Certifications .....	22
• Our Capabilities .....	24
• Our Clients .....	26
• Materials, Quality, Equipments .....	29
• Quality Management Plan .....	38
• Equipments Certification of Calibration .....	42
• Recognitions and Awards .....	45
• Examples of Live Projects 2022 .....	54
• Contact Us .....	58




**AL DHAFRA  
RECYCLING  
INDUSTRIES**  
 In partnership with Tadweer



# Managing Head







Ramy Youssef Alkhawaja

CEO

Ramy Youssef Alkhawaja is a hands-on guide for each project and builds trusted relationships with his partners, shareholders, customers, and staffs. Established the group since 2017, have always been captivated by strategic investments, mergers acquisitions, start-ups and developing new companies. We provide opportunities by partnering with leading companies of remarkable prominence including Tadweer. These partnerships have fortified our position across a wide range of sectors and actively partner of the UAE in achieving the nation vision.



Yosra Jedidi

COO

Yosra Jedidi a forward-thinking, multidisciplinary executive and business leader accomplished International Business. Over +10 years of diverse business services background including performance driven results in strategic planning, action plan execution, corporate leadership, profitability, project management, operational efficiency, staffing models and acquisition strategies.



Talal Tabbakh

General Manager

Talal Tabbakh has more than 16 years of experience in project management and business development for construction and infrastructure sectors in the UAE.

He holds two bachelor's degree in Executive Business Administration and Mechanical Engineering. And he has attended various courses/conferences concerning sustainable construction, recycling, and implementation of production lines. Continually driven to drive profitability, control costs, and improve processes.

# Who We Are?

---

Al Dhafra Recycling Industries\* is responsible for the processing of construction and demolition materials across the Emirate of Abu Dhabi. The aim of the facility is to reduce the level of construction and demolition material being disposed of in Abu Dhabi's landfills. In partnership with Tadweer, the facility processes material to produce recycled products suitable for use as road base aggregates and structured & non-structured backfill projects.

Regulations, introduced by Abu Dhabi's Executive Council, govern the recycling of construction and demolition material and its use in construction projects, as an alternative to further depleting scarce natural resources. Under the Executive Council's resolution (number 2008/373), construction projects are mandated to use a minimum quantity of 40 percent recycled material, if available.

---

\* Al Dhafra Recycling Industries operates in Abu Dhabi, United Arab Emirates, in partnership with Tadweer (The Centre of Waste Management).





The background image shows a large-scale construction or recycling site. In the foreground, a yellow excavator is positioned on a dark, uneven ground. In the background, another excavator is visible. A semi-transparent aerial inset is overlaid on the top half of the image, showing a wider view of the site with various pieces of machinery, including a conveyor belt system and several large white pipes or containers. The sky is a mix of blue and orange, suggesting a sunset or sunrise.

**Al Dhafra Recycling Industries operates in  
Abu Dhabi, United Arab Emirates, in partnership  
with Tadweer (The Centre of Waste Management)**

**" Our company is the only one of its kind in this work field within Abu Dhabi"**



# Our Partner

## Tadweer

Formally known as the Center of Waste Management Abu Dhabi, Tadweer is the leading provider of comprehensive waste and environmental services in the UAE.

Tadweer's vision is to create a quality environment through dedicated leadership and educational partnership to reduce wastage while promoting recycling and resource conservation.

For more information, visit [www.cwm.ae](http://www.cwm.ae)



## Tadweer Mission

Building Integrated Systems For Waste Management & Pest Control, & Providing Added Value Services To Customers & Society In Accordance With Approved Standards & Practices Through Building Effective Partnerships & Investment Of Assets, Financial, Human, & Technical Resources In Pursuit Of Sustainability By Conserving Natural Resources & Creating a Responsible Society That Contributes To Reducing Of Waste Generation & To Transform Waste Into An Economic Pillar For The Emirate Of Abu Dhabi

## Tadweer Vision

Towards a Sustainable Waste Management & Pest Control System In The Emirate Of Abu Dhabi

## Tadweer Values:

Sustainability . Excellence and Innovation . Accountability . Efficiency . Engagement Achieving Result







## Why Us?

We built our success throughout our previous years of experience on the appropriate understanding of the specificity of each case of our clients' projects, whose precious trust we gained. International and global keeping pace with the goals of sustainable development and modernizing our business strategy by introducing solar energy in our plant

« As well as the IoT technology will enable the C&D Waste Recycling Station to increase operating time to the maximum limit, while also improving energy efficiency through the use of smart remote movement sensors which will monitor the station's assets and machinery, as this technology will connect every device using a cloud-based platform that can produce a detailed analysis of every device's status.

In addition to smart wireless sensors monitor critical assets in the recycling plant, linking each device to the Sensoteq Analytix cloud platform that allows for detailed analysis of the device's health status.»

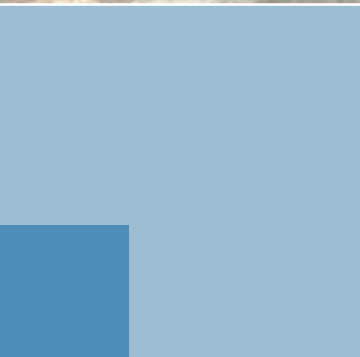
You can know more details by visiting company website and through Construction Week Article

Source: \* Construction Week Article: Tadweer applies IoT technology at C&D waste recycling station





When you put the  
whole picture together,  
**Recycling** is the right thing to do.





# World orientation towards sustainability and net zero

## Supporting Sustainable Development Goals

Where the issue of environment and sustainability has become a **global issue**, the current researches in construction fields aims to identify the employment of the dimensions of sustainable development in construction and waste recycling to develop environmental awareness, as the environment is considered one of the global problems that have become preoccupying many thinkers and researchers in environmental affairs,

As the current era is witnessing rapid scientific and technological progress and development in various fields of life, especially in the field of environment. In order to keep pace with this development and progress and the resulting important issues and dimensions in all economic, social and scientific aspects,.

This development must be reflected on an important group of society in issues of environmental awareness and sustainable development. The importance of our work lies in employing the dimensions of sustainable development in materials and waste recycling to develop awareness environmental.

## SUSTAINABLE DEVELOPMENT GOALS



# Our Work & Sustainability

## Sustainable & Environmental Achievements

**2011: Participation of Al Dhafra C&D Recycling facility in the 2011 Publication “Etihad Rail Waste Recycling will save 5 million Truck Kilometres”** that aims to supply at least 750,000 tonnes of recycled aggregates.

2017: The launch of Sustainable Construction and Demolition Waste management guideline.

2017: Winners of 2017 MENA Green Building Awards honored for innovation and excellence in sustainability practices by Emirates Green Building Council

2018: ENERWHERE has been contracted by Al Dhafra Recycling Industries since January 2018. A leading specialist in Solar plants and sustainable energy provider in the region.

2020: The recognition of Al Dhafra Recycling facility towards increasing the solar capacity to help lower its carbon footprint by avoiding more than 1,300 tonnes of carbon emissions

## Tadweer’s sustainable production goals\*

« **These measures are all in line with sustainable production goals because by** ensuring that equipment operates efficiently, we prevent dangerous and costly equipment failure incidents.

In 2020, Tadweer inaugurated Phase two of the solar power plant project at the C&D Waste Recycling Station in the Al Dhafra region of Abu Dhabi, making it the first station of its kind in the world to have %90 of its operations powered with solar energy.»

\* Source: Construction Week Article: Tadweer applies IoT technology at C&D waste recycling station







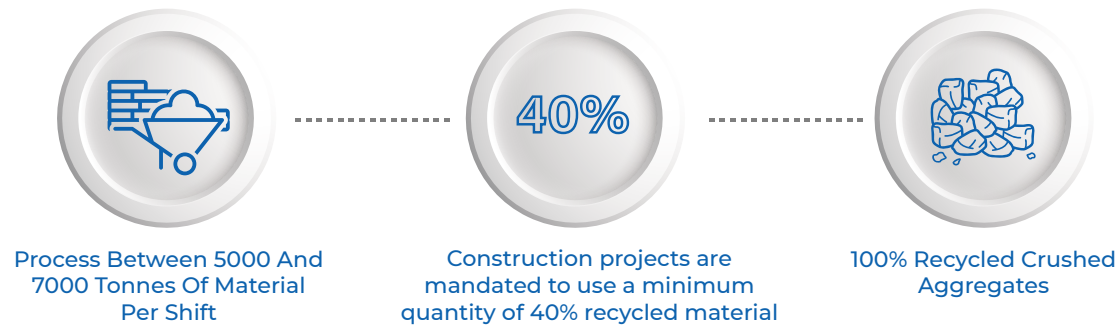


# Our Work





# Our Work & Accreditations

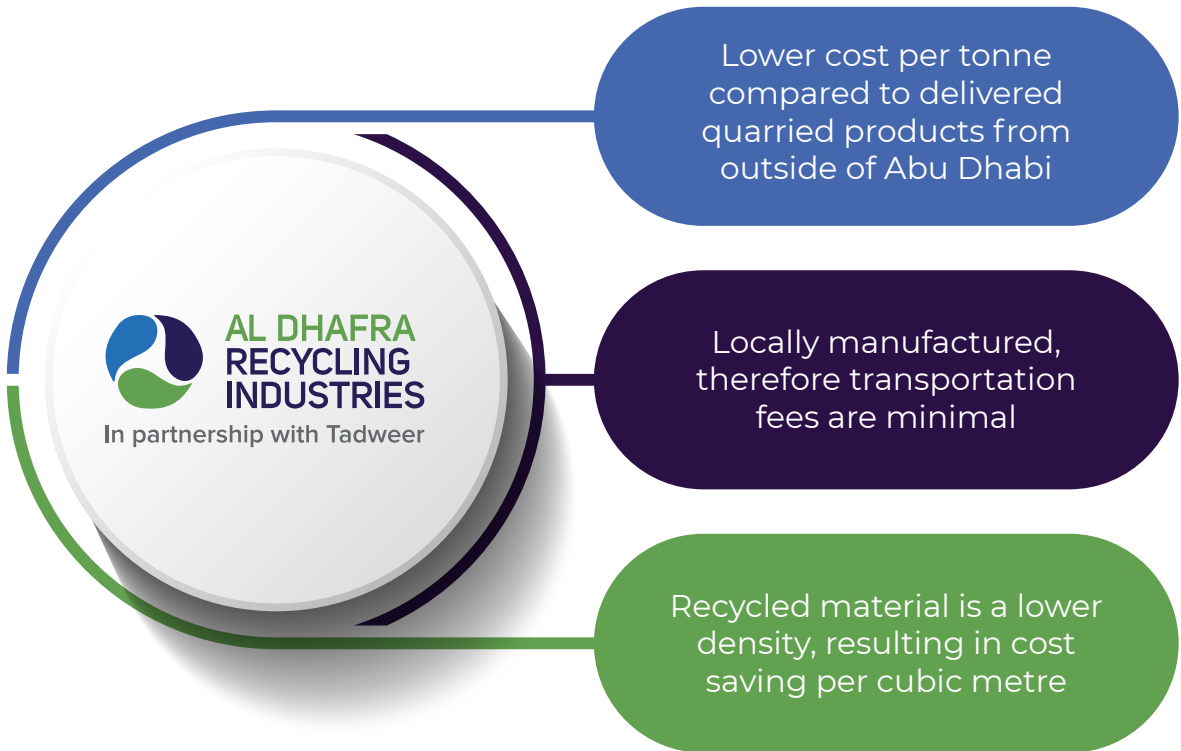


## Accreditations

Al Dhafra Recycling Industries has received accreditation from the following organisations:

- Tadweer/Centre of Waste Management
- Abu Dhabi Quality & Conformity Council
- ISO Certified
- Zonescorp
- Environment Agency Abu Dhabi (EAD)
- Abu Dhabi Chamber of Commerce
- Abu Dhabi Civil Defence

Use of recycled construction and demolition materials also yields a number of commercial benefits, including:





# Location Map





# ISO Certifications

Al Dhafra Recycling Industries operates according to Management Systems for Quality - ISO 9001:2008, Environment - ISO 14001:2004 and Health and Safety - OSHAS 18001:2007. Product testing is performed by a leading independent test laboratory in Abu Dhabi.





مجلس أبوظبي للجودة والمطابقة  
ABU DHABI QUALITY AND CONFORMITY COUNCIL



شهادة المطابقة

Certificate of Conformity

Certificate No.	<b>QAD-2022.0533.01-RA</b>	رقم الشهادة:
This certificate is issued for the product:	<b>RECYCLED CRUSHED AGGREGATES</b>	تم منح هذه الشهادة للمنتج:
Certificate Holder:	<b>Al Dhafra Recycling IndustriesLLC</b>	الخاص بشركة:
According to the requirements of:	<b>Recycled Crushed Aggregate Certification Scheme</b>	وفقا للمتطلبات الخاصة ب:
Issued Date:	<b>08 June 2022</b>	تاريخ الإصدار:
Expiry Date:	<b>07 June 2023</b>	تاريخ انتهاء الصلاحية:



QAD-2022.0533.01-RA

This is an electronic certificate and does not require stamp  
Visit our website to verify this certificate:  
<https://jawdah.qcc.abudhabi.ae/en/pages/homepage.aspx>  
Any changes or modification on this certificate will affect its validity

هذه الشهادة صدرت إلكترونياً ولا تحتاج إلى ختم  
للتأكد من صحة هذه الشهادة يرجى زيارة موقع جودة الإلكتروني:  
<https://jawdah.qcc.abudhabi.ae/en/Pages/homepage.aspx>  
أي كشط أو تغيير في هذه الشهادة يلغيها



مجلس أبوظبي للجودة والمطابقة  
ABU DHABI QUALITY AND CONFORMITY COUNCIL



وثيقة المطابقة

Conformity Document

Certificate No:	<b>QAD-2022.0533.01-RA</b>	رقم الشهادة:
Expiry Date:	<b>07 June 2023</b>	تاريخ الانتهاء:

Issuing Date: **08 June 2022** تاريخ الإصدار:

Conformity Scheme: **Recycled Crushed Aggregate Certification Scheme** برنامج المطابقة:

Product: **RECYCLED CRUSHED AGGREGATES** المنتج:

Name and Address of the Licensee: **Al Dhafra Recycling IndustriesLLC  
Hameem Road,E65, Plot P3, Al  
Shanayan, P.O Box: 91728, Abu Dhabi,  
UAE** اسم وعنوان صاحب الحق باستخدام العلامة:

Name and Address of the Manufacturer and the Factory: **Al Dhafra Recycling IndustriesLLC  
Hameem Road,E65, Plot P3, Al  
Shanayan, P.O Box: 91728, Abu Dhabi,  
UAE** اسم وعنوان المصنع ومكان التصنيع:

Trademark / Brand Name: **SUB BASE AND BASE COURSE** العلامة التجارية / الاسم التجاري:



QAD-2022.0533.01-RA

This is an electronic certificate and does not require stamp  
Visit our website to verify this certificate:  
<https://jawdah.qcc.abudhabi.ae/en/pages/homepage.aspx>  
Any changes or modification on this certificate will affect its validity

هذه الشهادة صدرت إلكترونياً ولا تحتاج إلى ختم  
للتأكد من صحة هذه الشهادة يرجى زيارة موقع جودة الإلكتروني:  
<https://jawdah.qcc.abudhabi.ae/en/Pages/homepage.aspx>  
أي كشط أو تغيير في هذه الشهادة يلغيها

Page 1 of 2



# Our Capabilities

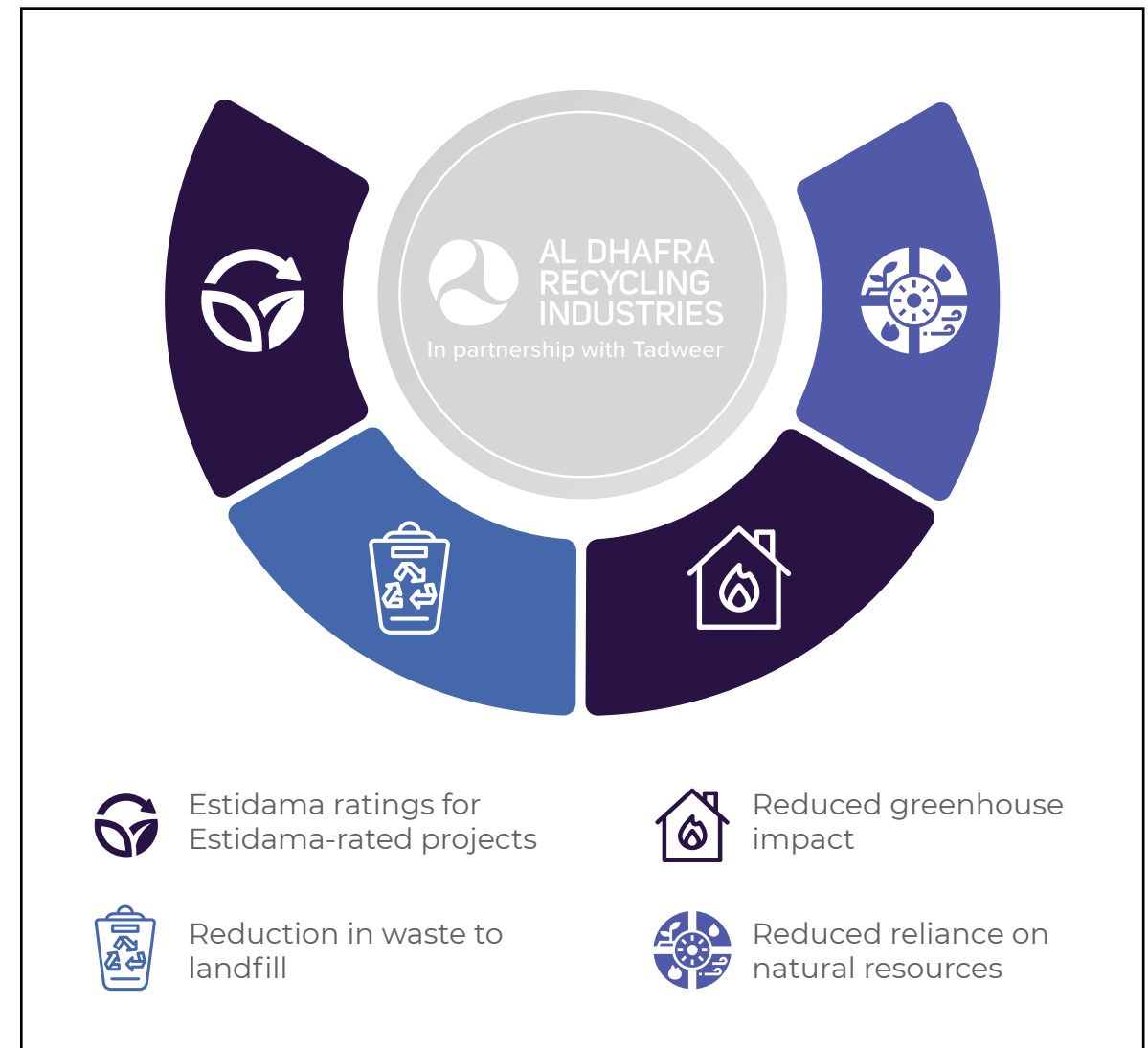
In line with Abu Dhabi Government's vision for sustainability, and under the Government concession awarded in 2009, Al Dhafra Recycling Industries, and Tadweer, facilitate the receiving and processing of construction and demolition material, such as concrete, asphalt and excavation material.

Al Dhafra Recycling Industries has the capacity, resources and expertise to design, build and operate numerous resource recovery projects via the collection, tracking and processing of construction and demolition materials.

All materials sent to the recycling plant are inspected for suitability before processing. Metals and other non-suitable materials are extracted before the construction and demolition material is diverted to the processing plant.

Following additional product testing by third party independent laboratories, well-graded recycled material (37-mm) is produced, which is used for road-base, sub-base, structural fill, trench bedding, hardstand and low-dust asphalt products.

All recycled material produced at Al Dhafra Recycling Industries is %100 recycled crushed aggregates. Use of recycled crushed aggregates also achieves:









# Our Clients

Through company work journey; our clients, customers, companies from many construction industries, and from both governmental and private sections have relied on us, and we were keen to provide tailored materials solutions for our clients to facilitate their building and infrastructure results and strategy development.

Recycled material is currently being used as road base for construction in various prestigious projects such as:

- Abu Dhabi Airport Company - Abu Dhabi Airport T3 Project
- Abu Dhabi Municipality - Abu Dhabi City road works
- Abu Dhabi National Oil Company (ADNOC)
- Abu Dhabi Ports Company - Khalifa Port Project
- Etihad Rail - Shah-habshan-Ruwais Railways
- Habshan Crude Oil Pipeline for IPIC
- Shah Gas Development
- Western Region Municipality
- DoT / Musanada

For example part from our work steps is attend internal quality audits performed in accordance with schedule & address opportunities for improvements (OFI) & Major/Minor non-conformances raised as Audits are scheduled and planned through the Site HSE Activity Tracker and Attend internal quality audits & action system deficiencies where identified in a timely manner, this step and the rest of Al Dhafra Recycling Industries work process is supervised precisely and in detail to assure quality as it should be.









# Materials, Quality, Equipments





## Quality and Performance

International &  
Local experience  
demonstrates that  
recycled products  
perform as well if not  
better than virgin natural  
materials

## Environmental

- Fits Abu Dhabi's vision for sustainability/ESTIDAMA requirements
- More than %50 reduction in waste to landfill
- Reduced greenhouse impact (production and transportation of quarried products)
- Reduced reliance on natural resources
- Recycling Steel

## Financial/Commercial

- Cost competitive compared with delivered quarried products
- Locally manufactured in Abu Dhabi rather than imported (Strategic)
- Location; Hameem Road, Western Region, AD.
- Lower density of material results in savings {%20-15 SAVING}





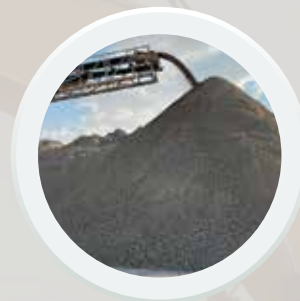
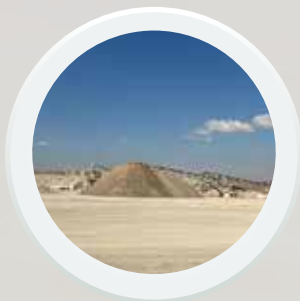
We hereby confirm that  
the material produced from our plant is  
**%100 Recycled Crushed Aggregates (RCA).**



## RCA Applications

The materials received in our plant are Construction and Demolition materials which are all covered by the C&D concession, as such, we hereby confirm that the material produced from our plant is %100 Recycled Crushed Aggregates (RCA).

The material produced is a 0-37.5mm well graded meeting the requirement of Recycled Crushed Aggregates for Base Course and Sub base specifications.



Products: Recycle Crushed Aggregate (37-0mm)

Aggregate Base course/ Sub Base

Wet-mix Macadam

Sub Ballast & Structural fill

Trench bedding

Hardstand and low dust asphalt products

Foundation products

Car Parks, site mobilization, temporary roads access and so forth.

**Aggregates Single Size to be added in;**

**Ready-mix  
Concrete**

**Precast, Blocks  
and interlocking  
Factories**

**Asphalt  
Wearing & Base  
course  
mix designs**

**Pavement &  
Pipe Bedding**

**Recycled Asphalt Product (Crushed Asphalt 37.5 mm- 0mm) over 300,000 tons available**



# Materials Specification

Sampels for detailing the specifications that are applicable for each Raw Material or Consumable, each as mutually approved in writing by the parties.

**element** Element Technology Ltd (United Arab Emirates) P.O. Box 11728, Abu Dhabi, U.A.E. Tel: +971 55 555 1100 Fax: +971 55 555 1101 Email: info@elementuae.com

**TEST CERTIFICATE**  
Tests carried out at Al Reem Island Laboratory, Abu Dhabi

Client: Al Dhafra C & D Recycling Facility  
Address: P.O. Box 11728, Abu Dhabi, U.A.E.  
Contact: Mr. Karim Ibrahim Eldeiry  
Mobile No: +971 55 555 1100  
Tel. No: +971 55 555 1100  
Fax No: +971 55 555 1101  
Email ID: Karim.Eldeiry@alreem.ae

Element Ref. No: A23-00076 Rev. 0  
Date Received: 04 January 2022  
Date Reported: 10 February 2022  
Date Tested: 04/01/2022 - 16/01/2022  
Tested By: Moad / Sandeep / Jiro / Ray / Neel / Rajith

Order No:

Description: (Information Provided)  
Project: Al Dhafra C & D Recycling Facility  
Project Owner: Tadweer  
Main Contractor: Al Dhafra C & D Recycling Industries  
Material Description: Subbase / Base Course Materials  
Client Reference: Element Ref. No. - TS-10942  
Source: Recycling Material  
Supplier: Al Dhafra C & D Recycling Facility  
Weather Condition: Sunny  
Date of Sampling: 02/01/2022 - 09/01/2022  
Sampled By: Element  
Sample Location: Production Site Dry

**SIEVE ANALYSIS** Test Method: BS 812 Sec 103.1: 1995

Test Sieve Size, mm	Total Passing, %
37.5	100
25.0	98
20.0	80
14.0	67
10.0	36
6.3	48
5.0	40

**FLAKINESS INDEX** Test Method: BS 812 Part 105.1: 1995

Flakiness Index
11

Project Limit - Max 30%

**ELONGATION INDEX** Test Method: BS 812 Part 105.2: 1995

Elongation Index
19

Project Limit - Max 30%

Page 1 of 4

**ACCREDITED** **ISO 9001** **ISO 14001**

**element** Element Technology Ltd (United Arab Emirates) P.O. Box 11728, Abu Dhabi, U.A.E. Tel: +971 55 555 1100 Fax: +971 55 555 1101 Email: info@elementuae.com

Client: Al Dhafra C & D Recycling Facility  
Project: Al Dhafra C & D Recycling Facility

Element Ref. No: A23-00076 Rev. 0  
Date Reported: 10 February 2022

**LOS ANGELES ABRASION\*** Test Method: AASHTO T96-02 (Reapproved 2015)

Grading	Loss, %
A	22

Project Limit: Max 40%

**FRACTURED PARTICLES IN COARSE AGGREGATES\*** Test Method: ASTM D5821-13 (Reapproved 2017)

Test Condition	Result, % by Weight
Two or more fractured faces material retained on 4.75mm	100

**CBR TEST PREPARATION & COMPACTION\*** AASHTO T99-19 (Clause 5 & 6)

**COMPACTION DATA**

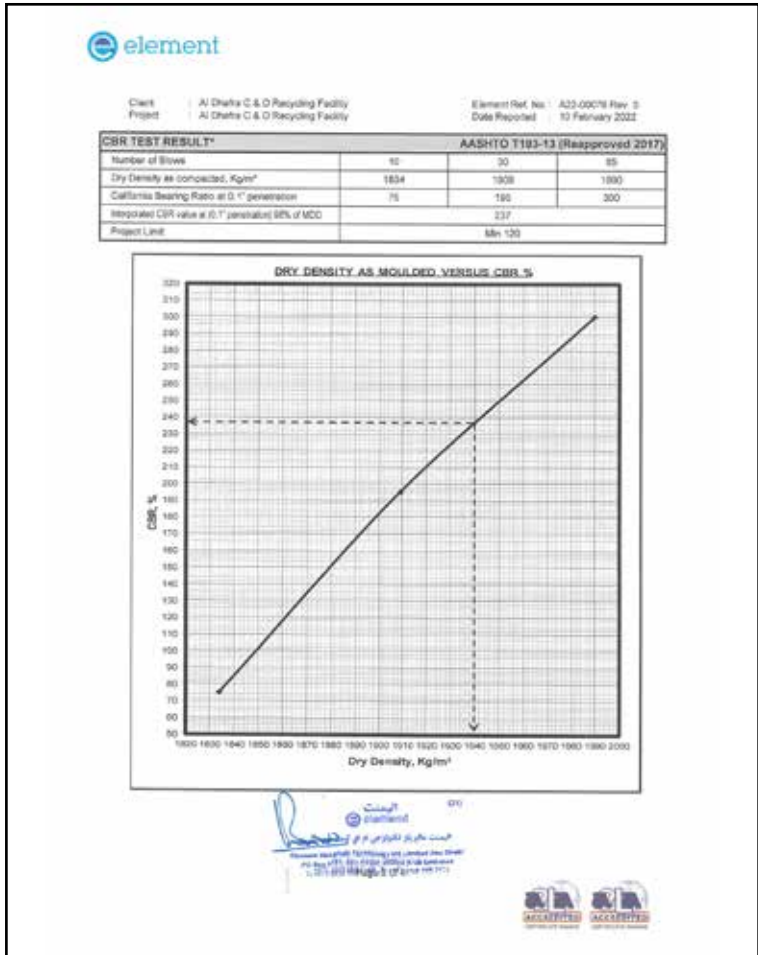
Number of Blows	10	30	85
Material Retained on 10 Gm, %	18	18	18
Material Passed	18	18	18
Moisture content as compacted, %	9.9	9.9	9.8
Dry Density as compacted, Kg/m³	1834	1909	1990

**SOAKING & AFTER TEST DATA**

Test Condition	Soaked	Soaked	Soaked
Surcharge Amount, Kg	4.54	4.56	4.56
Soaking Period (hrs)	96	96	96
Swell, %	0.07	0.04	0.03
Moisture content top 1 inch, %	14	13	12

Page 2 of 4

**ACCREDITED** **ISO 9001** **ISO 14001**



Sampels for detailing the specifications that are applicable for each Raw Material or Consumable, each as mutually approved in writing by the parties.

element

Client: Al Dhafra C & D Recycling Facility  
Project: Al Dhafra C & D Recycling Facility  
Element Ref. No.: A22-00076 Rev. 0  
Date Reported: 10 February 2022

**CHLORIDE CONTENT** Test Method: BS 812 Pt 117: 1998  
Add Soluble Chloride Content, % (by Weight) Project Limit: Max 2%  
Result: 0.48

**SULPHATE CONTENT** Test Method: BS 812 Pt 118: 1998  
Add Soluble Sulphate, SO<sub>3</sub>, % (by Weight) Project Limit: Max 2%  
Result: 1.14

**BOUNDNESS OF AGGREGATES\* - MgSO<sub>4</sub>** Test Method: AASHTO T194-99 (Reapproved 2016)

**COARSE AGGREGATE**

Test Fraction Size, mm	Original Retained, %	Weighted test fraction before test, g	% passing designated sieve after test	Weighted loss, %
37.5 - 19.0	18	1813.7	9.6	0.3
19.0 - 9.5	28	1001.8	2.7	0.8
9.5 - 4.75	10	300.2	5.7	0.8
4.75 Passing	44	—	—	—
Total Loss	—	—	—	1.9
Project Limit	—	—	—	Max 15%

**FINE AGGREGATE**

Test Fraction Size, mm	Original Retained, %	Weighted test fraction before test, g	% passing designated sieve after test	Weighted loss, %
4.75 Retained	36	—	—	—
4.75 - 2.36	12	100.0	16.7	2.4
2.36 - 1.18	7	100.0	16.1	1.3
1.18 - 0.600	8	100.0	15.8	0.8
0.600 - 0.300	6	—	—	—
0.300 - 0.150	—	—	—	—
0.150 - 0.075	—	—	—	—
0.075	—	—	—	—
Total Loss	—	—	—	5
Project Limit	—	—	—	Max 15%

Certificate Comments: Above test results meet the requirements of Clause 2.2 & 2.3 of Recycled Crushed Aggregate (RCA) Base Course Specification, Version 2 - 6th March 2012, wherever applicable.

Notes: 1. \*AM AZLA accredited.  
2. MOD (1000g/m<sup>3</sup>) and DMC (5.8%) value was provided by Element Site Laboratory.  
3. Sieve Analysis reported for Flakiness & Elongation Index Purpose.  
4. Conformity statement reported with no decision rule applied.

For and on behalf of Element Materials Technology Ltd Limited Abu Dhabi

Signature: [Signature]  
Name: [Name]  
Title: [Title]  
Address: [Address]  
Phone: [Phone]  
Email: [Email]

element

Client: Al Dhafra Recycling Industries  
Address: P.O. Box 81728, Abu Dhabi, UAE  
Contact: Mr. Karam Ibrahim Sidawy  
Email: karam.sidawy@adri.ae  
Project: Al Dhafra Recycling Facility  
Contractor: Not Applicable  
Supplier Reference: Crushed Concrete Materials  
Client Reference: Subbase / Base Course Materials  
Sample Source: Recycling Material  
Sample Date: 02 January 2022 @ 09:00 Hrs.  
Weather Condition: Sunny  
Sampled By: Element  
Sample Location: Production pile

Element Ref. No.: Element-TS-10642 Rev. 0  
Date Received: 03 January, 2022  
Date Reported: 05 January, 2022  
Tested By: Khaledan

**TEST CERTIFICATE**  
(Sampled, Tested and Reported from Al Dhafra Recycling Industries Sub-Lab - Al Dhafra)

**SIEVE ANALYSIS** Test Specification: ASTM C 136/C136M-19 & C117-17

Sieve Size, mm	Total Passing, %
50.0	100
37.5	100
25.0	92
19.0	82
12.5	63
9.5	54
4.75	44
2.36	33
2.00	29
1.18	23
0.600	21
0.425	19
0.300	17
0.150	6
0.075	5

Graph: Sieve Size, mm vs. Passing %

Notes: 1. \*AM AZLA accredited.  
2. MOD (1000g/m<sup>3</sup>) and DMC (5.8%) value was provided by Element Site Laboratory.  
3. Sieve Analysis reported for Flakiness & Elongation Index Purpose.  
4. Conformity statement reported with no decision rule applied.

For and on behalf of Element Materials Technology Ltd Limited Abu Dhabi

Signature: [Signature]  
Name: [Name]  
Title: [Title]  
Address: [Address]  
Phone: [Phone]  
Email: [Email]

element

Client: Al Dhafra Recycling Industries  
Project: Al Dhafra Recycling Facility  
Element Ref. No.: Element-TS-10642 Rev. 0  
Date Reported: 05 January, 2022

**MOISTURE CONTENT** Test Method: ASTM D 2216-19  
Moisture Content, %  
Result: 5.1

**SAND EQUIVALENT** Test Method: AASHTO T176-00  
Sand Equivalent, %  
Result: 57

**PLASTICITY INDEX\*** Test Specification: ASTM D 4318-10<sup>1</sup>

Test	Liquid Limit (%)	Plastic Limit, %	Plasticity Index
Result	—	—	—
ASTM D2940-03 Limits	Max 25	—	Non-Plastic
Class 2 Crushed Concrete Spec Limit	Max 35	—	Max 6

**METAL, GLASS AND ASPHALT PIECES IN COARSE AGGREGATE COARSER THAN 5.0mm\***  
TEST METHOD: Generally, in accordance with BS 812: Part 106:1985 Clause 6

Test Fraction Size	Result, % of Metallic (steel, aluminum, and iron)	Result, % High Density (glass, brick, and asphalt)
Retained 5.00 mm	Nil	2.03
Abu Dhabi Quality and Conformity Council (ADQCC) Limit	Max 1	Max 10

**LOW DENSITY MATERIALS SUCH AS PLASTIC, RUBBER, PLASTER AND OTHER FRIABLE MATERIALS IN COARSE AGGREGATE COARSER THAN 5.0mm\***  
TEST METHOD: Generally, in accordance with BS 812: Part 106:1985 Clause 6

Test Fraction Size	Result, % of Low Density (Plastic, rubber, plaster, clay lumps and others friable materials)
Retained 5.00 mm	0.54
Abu Dhabi Quality and Conformity Council (ADQCC) Limit	Max 1

**WOOD, OTHER VEGETABLE OR DECOMPOSABLE PIECES IN COARSE AGGREGATE COARSER THAN 5.0mm\***  
TEST METHOD: Generally, in accordance with BS 812: Part 106:1985 Clause 6

Test Fraction Size	Result, % of Wooden pieces
Retained 5.00 mm	0.14
Abu Dhabi Quality and Conformity Council (ADQCC) Limit	Max 0.20

Certificate Comments: 1. The Above test result meets the Subbase requirements for Recycled Crushed Aggregate Subbase Section 3.2.6 Table 3-17, RCA Sub-base physical requirements of Page No 3 of 34 Abu Dhabi Quality and Conformity Council (ADQCC) Limit.  
2. Conformity statement reported with no decision rule applied. Uncertainty of measurement available upon request.

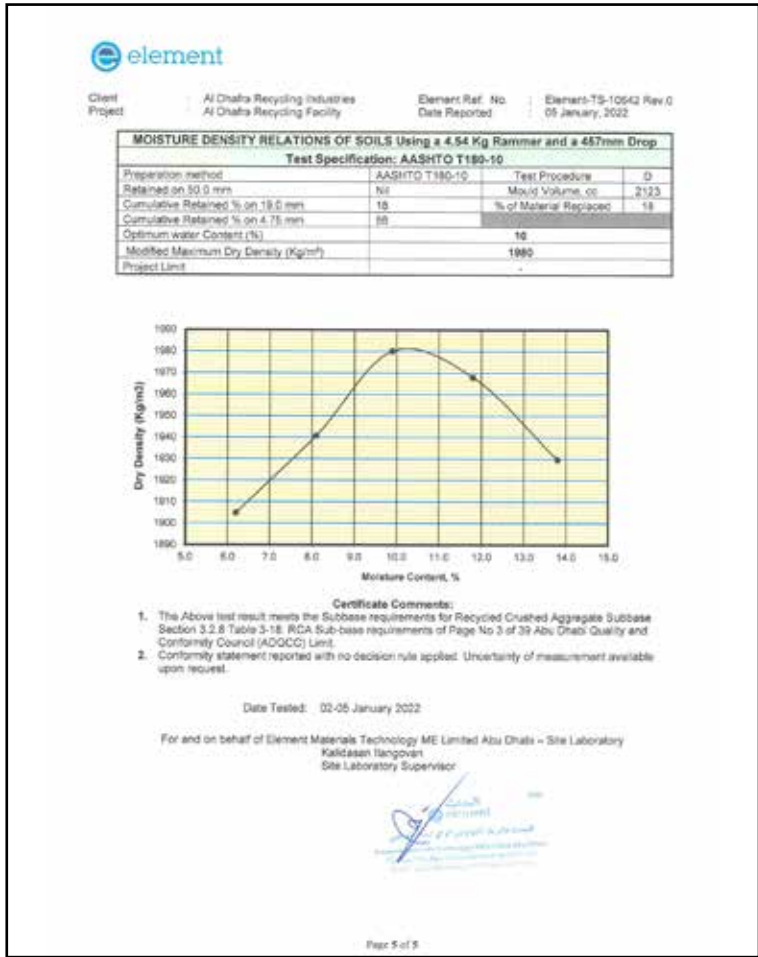
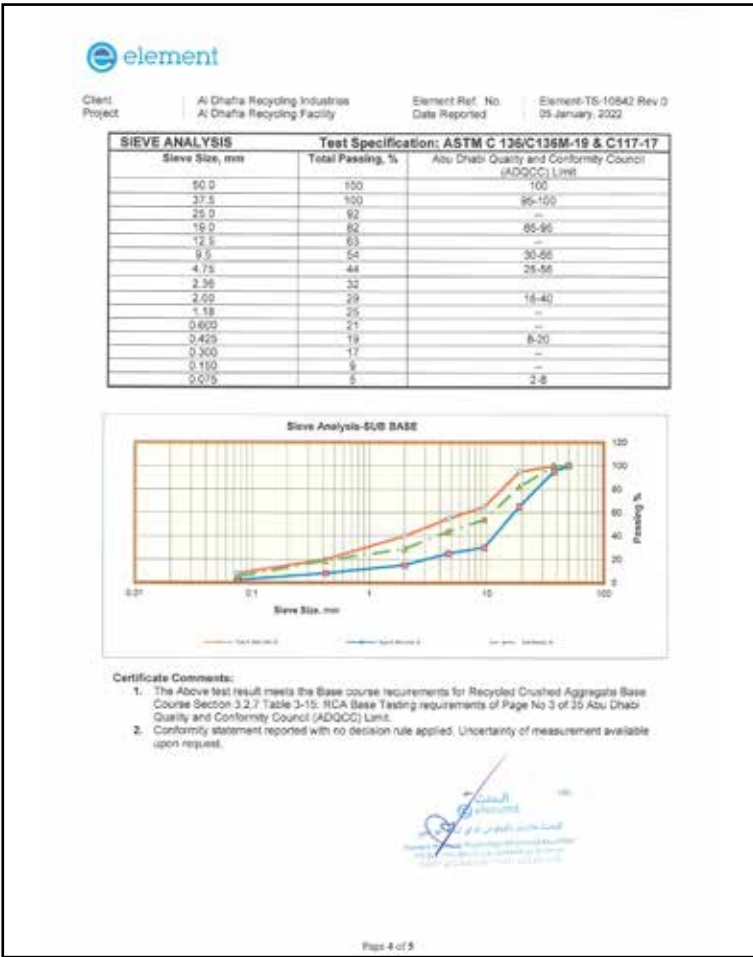
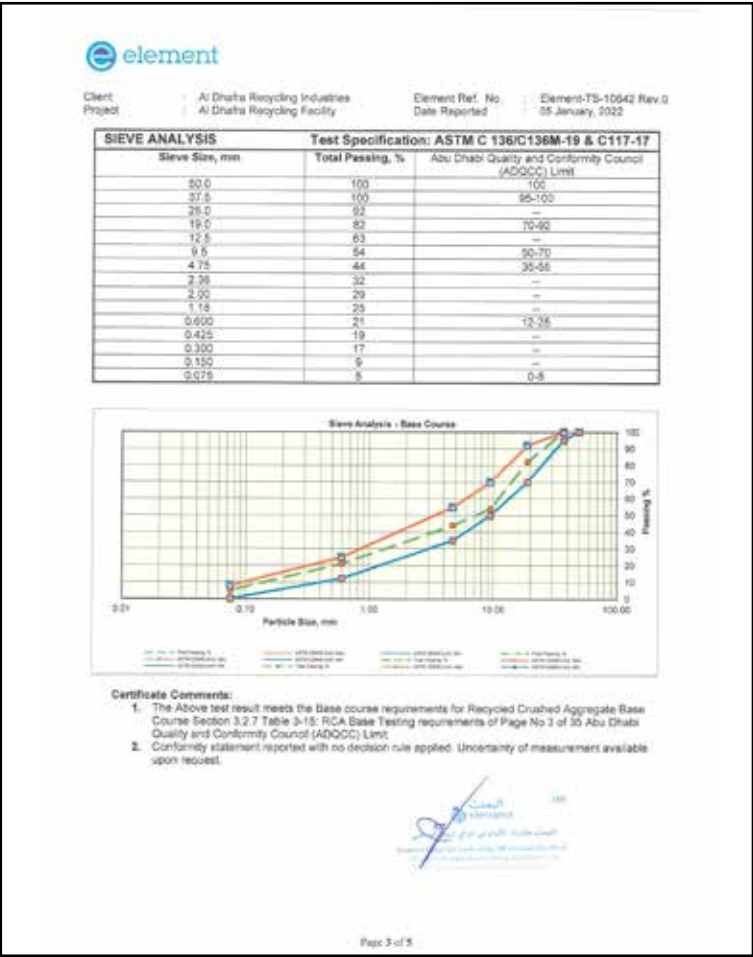
For and on behalf of Element Materials Technology Ltd Limited Abu Dhabi

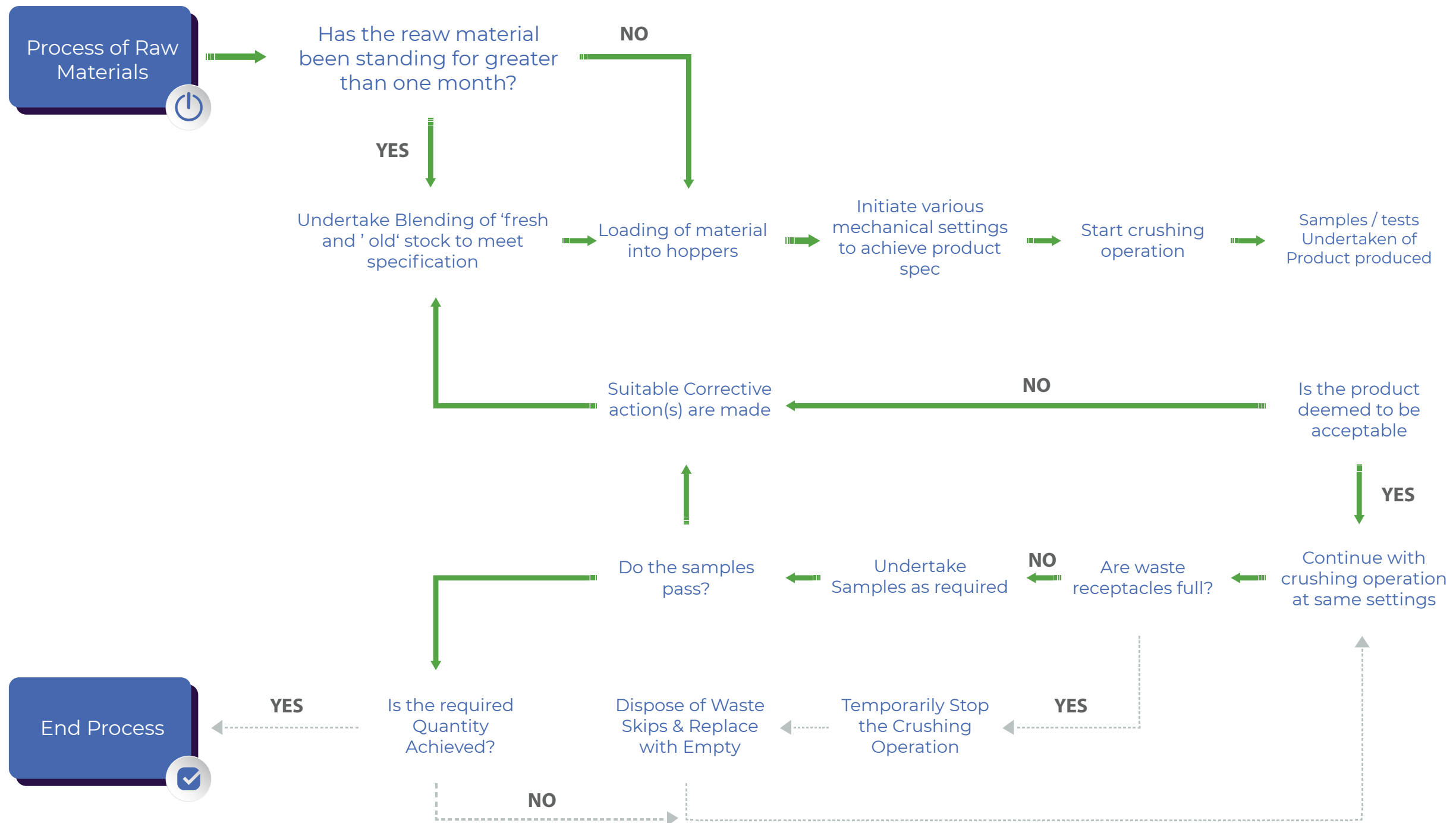
Signature: [Signature]  
Name: [Name]  
Title: [Title]  
Address: [Address]  
Phone: [Phone]  
Email: [Email]



# Materials Specification

Sampels for detailing the specifications that are applicable for each Raw Material or Consumable, each as mutually approved in writing by the parties.





Incoming Material Process Flowchart



# Quality Management Plan

The Quality Management Plan (QMP) describes the approach to quality management (QM) on the Project or Operation.  
The objectives of the plan are to:

- Provide the framework for how QM processes will be managed to support successful Project delivery and Operational Activities
- Detail how the Project / Operation will ensure compliance with the Al Dhafra Recycling Industries Quality Manual, relevant legislative and contractual requirements
- Communicate roles and responsibilities
- Identify supporting procedures and tools.

## Plan Structure

The QMP has the following structure:

### Part A

- A plan overview that clearly defines:
- Quality Manual Elements and Expectations
  - Legislative and Client requirements
  - Key performance indicators

### Part B

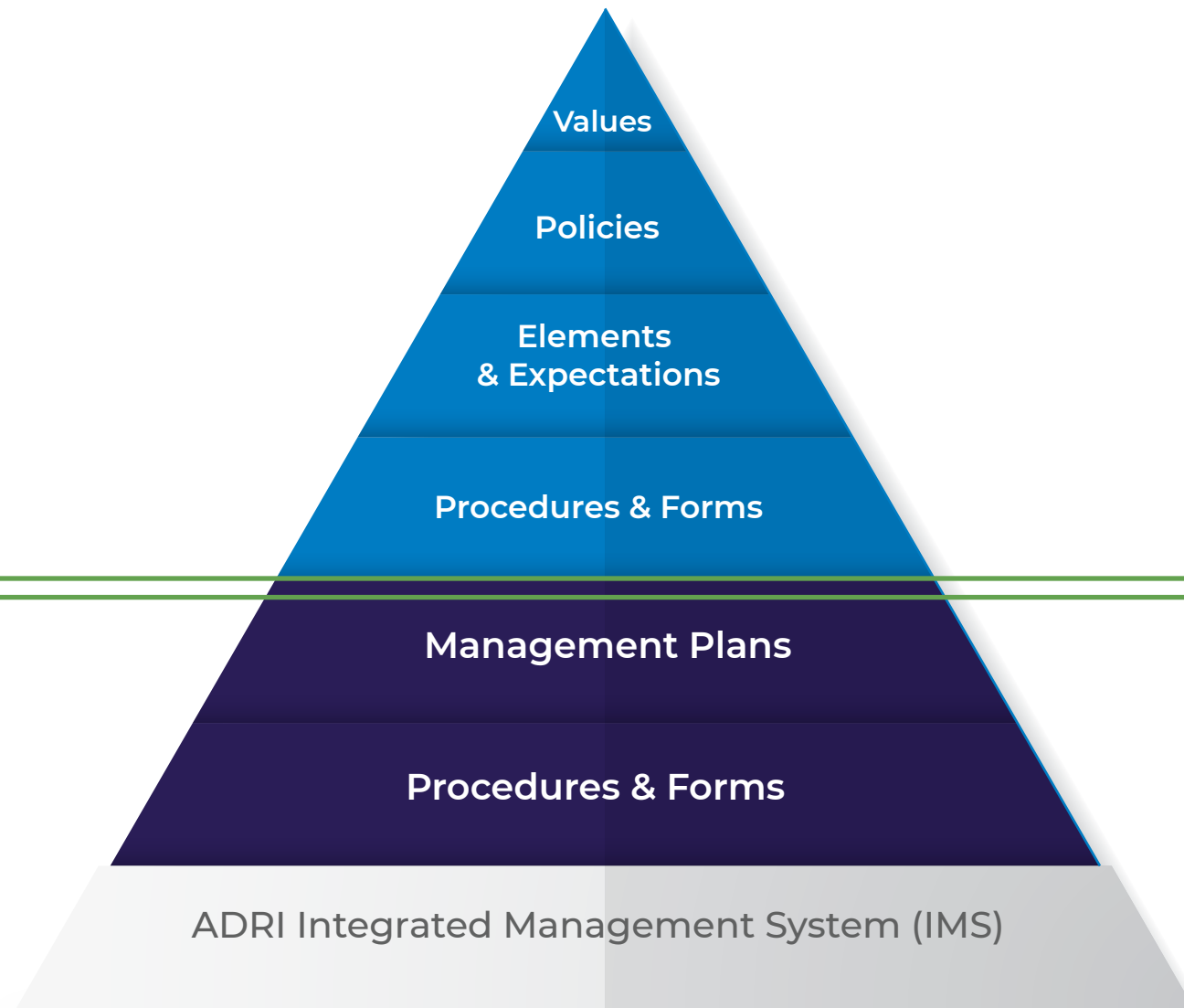
- An implementation plan that describes:
- How the Project / Operation will meet each Element and Expectation
  - Responsibilities for each Expectation
  - The Procedures and Deliverables for each expectation

### Annexures

Provides the supporting detail behind the methodology and systems used to support the implementation plan

Al Dhafra Recycling Industries Integrated Management System (IMS):  
The Al Dhafra Recycling Industries IMS is an integrated set of tools and resources that define how we manage quality, health & safety and environment at all levels of our business. It has the following structure:

Developed by  
Corporate Functions



These Elements define  
the framework standards  
and resources that apply  
on all services projects  
and operations

Developed by  
Business Stream  
or = Project / Operation

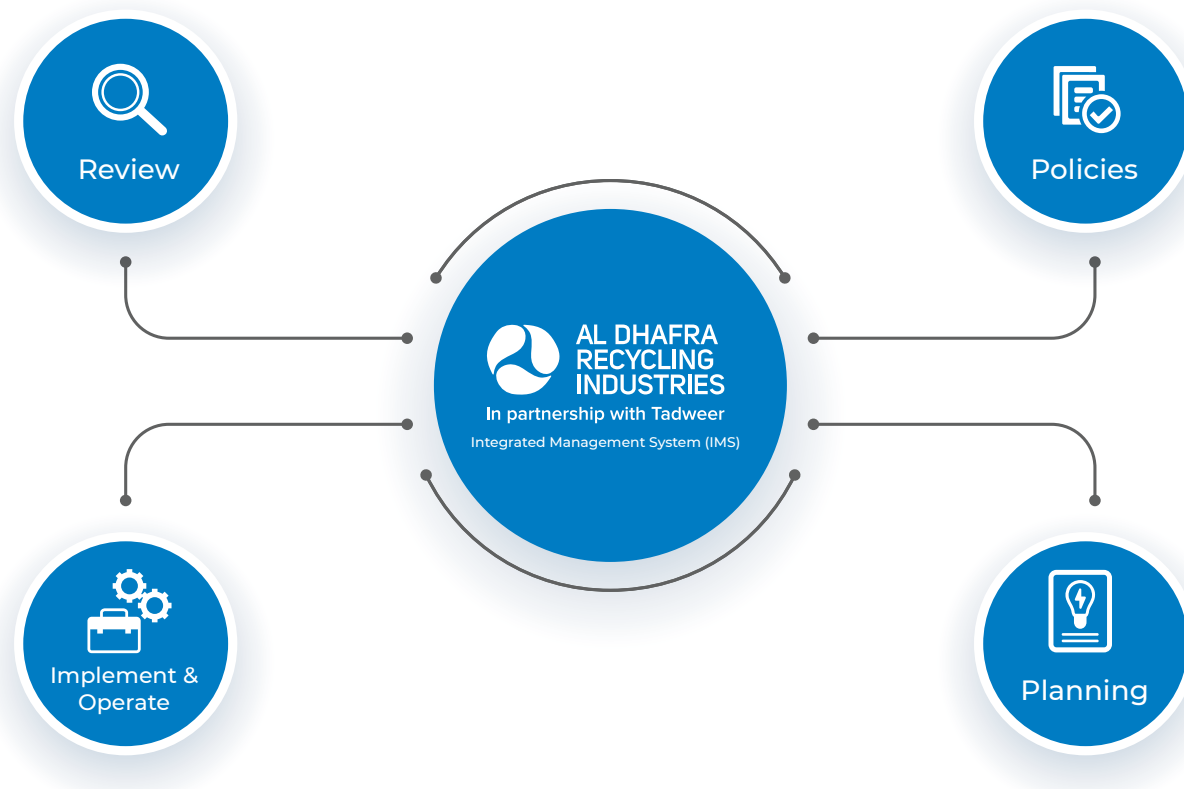
The Project or Operation  
builds elements of the  
management system to  
develop a specific  
management plan and  
supporting resources as  
required



# Quality Management Plan

## Integrated Management System Continuous Improvement

The Al Dhafra Recycling Industries IMS has a continuous improvement mechanism embedded in its Elements:



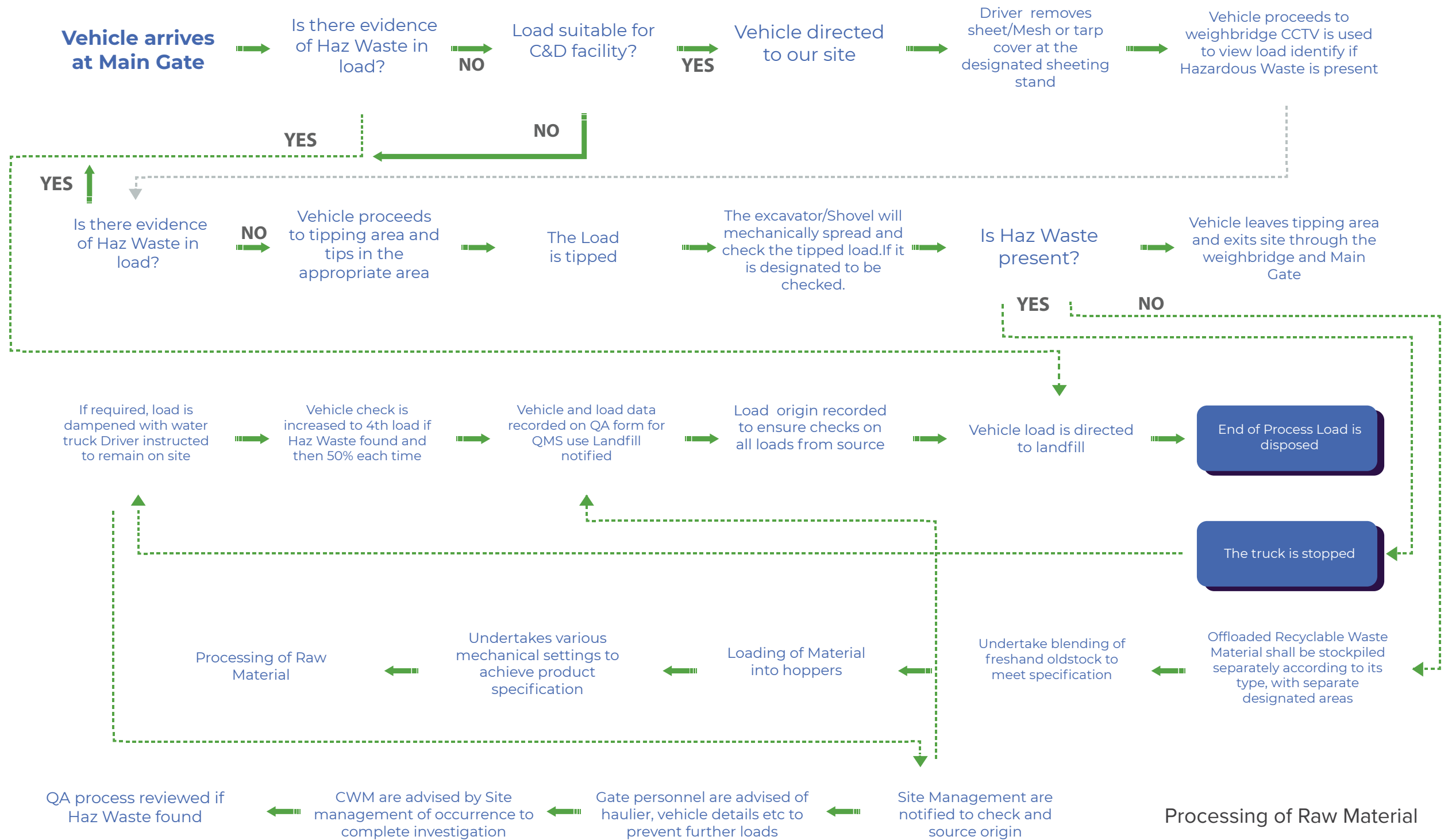
## Elements and Expectations

The QMP is based on the Al Dhafra Recycling Industries Quality Manual set of 11 Elements that describe requirements for quality management. Each Element is supported by a short intent statement and a set of expectations or key outcomes to be delivered as part of that Element.

- Element – Key aspects for managing this function on the Project
- Intent – A one-line statement describing the overall purpose of the Element
- Expectation – The high-level outcomes achieved as part of each Element.

This hierarchy provides a consistent structure that is applied across all work management plans, and these elements are:

- Element 1: Leadership, Accountability and Culture
- Element 2: Planning
- Element 3: Product, Materials, Sub-contractors and Suppliers
- Element 4: Work Procedures
- Element 5: Resources, Training, Induction and Competency
- Element 6: Stores and Incoming Goods
- Element 7: Inspection & Testing
- Element 8: Conformity
- Element 9: Document & Record Management
- Element 10: Monitor Process Performance
- Element 11: Audit & Review





# Equipments Certification of Calibration

**Samples of documents contains information about part of our devices calibration. This certificate provides valuable information on the quality and measurement accuracy of the device.**


**RELIABLE**

**ريليابل**  
 CALIBRATION AND MEASUREMENTS LABORATORY

S.T. Sultan Khalifa Al Nahyan Show room, Trade Ar Rumar, P.O.Box : 9998, Dubai, U.A.E. Tel : +9743898888, E-mail : lab@reliableglobal.com, Web : www.reliableglobal.com

## CERTIFICATE OF CALIBRATION

ISSUED BY : RELIABLE CALIBRATION & MEASUREMENTS LABORATORY

REQUEST NO. :

RI22049

DATE OF ISSUE :

20/06/2022

CERTIFICATE NO. :

RA22066-01

Calibration Date

19/04/2022

Client Details

Al Dhafra Recycling Industries LLC.

Recommended Due Date

19/04/2023 (As Requested by the Customer)

P.O. Box No: 91726, Abu Dhabi, UAE

Environmental Conditions

Temperature :

43.0 ± 0.1 °C

Location :

WB #1

Relative Humidity :

53 ± 10%

Atmospheric Pressure :

984 ± 5 mbars

Details of the equipment (UUT)

Equipment :

Electronic Weightbridge

Capacity :

120000 kg

Manufacturer :

Avery Weigh Tronix

Repeatability :

30 kg

Model No. :

2X555-S01

Size of the Weightbridge :

18 X 3 Meter

Serial No. :

144200022

Number of Loadcells Used :

8 Loadcell

Method Used For Calibration

RCM-VIP-03 (Based on Euramet up-18 V-04)

Reference Used For Certification

Standard Test weights, Certificate No. RA21089-01.

(Calibrated by ILAC accredited laboratory, traceable to National / International standards)

Traceability

All measuring equipment used for calibration purposes is traceable to National or Internationally recognised accredited Standards Laboratory through approved accreditation bodies.

Uncertainty Statement:

The uncertainty reported is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%.

Calibrated by (Cal. Eng.)



Abdul Gaffar

Approved by (Quality Manager)

Shaykh Khamar

ILAC 2000/1-02 Rev-01 Date 04-10-2015

Page 1 of 2


**RELIABLE**  **ريليابل**  
 CALIBRATION AND MEASUREMENTS LABORATORY مقياس للمعايرة والقياسات  
 S.T. Sultan Khayfa in Harbur Sharek, Katt Al Nassar, P.O.Box : 99948, Dubai, U.A.E. Tel : +97143999955, E-mail : info@reliablecal.com, Web : www.reliablecal.com

## CERTIFICATE OF CALIBRATION

ISSUED BY : RELIABLE CALIBRATION & MEASUREMENTS LABORATORY

REQUEST NO.

PC22168

DATE OF ISSUE

23/08/2022

CERTIFICATE NO.

RA220268-01

### On Center Base

Position 1 (kg)	Position 2 (Center) (kg)	Position 3 (kg)
41790	41792	41790

### Repeatability Test - 7x200 kg

True	1	2	3	4	5	Average
Indicated weight in kg	74825	74826	74800	74800	74800	74812

### Before Adjustment

Nominal Mass in (kg)	1000	12000	24000	48000	72000
Weightbridge Ind. in (kg)	1000	12008	24000	47980	71980

### Weightbridge Adjusted

Yes	No
✓	

### After Adjustment

Applied Nominal Mass in (kg)	Weightbridge Indication in (kg)	Error in (kg)	Uncertainty in (kg)	Relative Uncertainty
1000	1000	0	80.0	8.10E-02
12000	12000	0	90.0	7.50E-03
24000	24000	0	90.0	3.68E-03
48000	48000	0	90.0	1.90E-03
72000	72000	0	90.0	1.25E-03
98000	98980	-20	90.0	9.40E-04
120000	119980	-20	92.1	7.70E-04

\*\*\* End of Certificate \*\*\*

48-345-000017-00 Rev-03 (Page No. 01/004)

Page 3 of 3



# RELIABLE

CALIBRATION & MEASUREMENTS LABORATORY



# ريليايبل

مختبر المعايرة والقياسات

B-7, Sultan Khalifa Al Nahdher Street road, Badi Al Haraz, P.O.Box: 59058, Dubai, U.A.E. Tel : +9714399005, E-mail: info@reliablelab.com, Web: www.reliablelab.com

## CERTIFICATE OF CALIBRATION

ISSUED BY : RELIABLE CALIBRATION & MEASUREMENTS LABORATORY

REQUEST NO. :

R02269

DATE OF ISSUE :

22/08/2022

CERTIFICATE NO. :

RAJ2269-02

### Calibration Date

18/08/2022

### Client Details

Al Dhafra Recycling Industries LLC.

### Recommended Due Date

18/02/2023 (As Requested by the Customer)

P.O. Box No: 91726, Abu Dhabi, UAE

### Environmental Conditions

Temperature :

40.4 ± 3°C

Location :

Vib # 2

Relative Humidity :

65 ± 10%

Atmospheric Pressure :

694 ± 5torr

### Details of the equipment (UUT)

Equipment :

Electronic Weighbridge

Capacity :

120000 kg

Manufacturer :

Central

Readability :

20 kg

Model No. :

210

Size of the Weighbridge :

19 X 3 Meter

Serial No. :

E36017-0166

Number of Loadcell's Used :

8 Loadcell

### Method Used For Calibration

RCM, OIML-C3 (Based on Euroim oip-18 V04)

### Reference Used For Certification

Standard Test weights, Certificate No. RAJ262-01.

(Calibrated by EAC accredited laboratory, traceable to National / International standards).

### Traceability

All measuring equipment used for calibration purposes is traceable to Nationally or Internationally recognized accredited Standards Laboratory through approved accreditation bodies.

### Uncertainty Statement

The uncertainty reported is based on a standard uncertainty multiplied by a coverage factor  $k=2$ , providing a level of confidence of approximately 95%.

Calibrated By (Cal. Eng.) :

Abdul Gaffar

Approved by (Quality Manager) :


Shamsh Kumaar



This Certificate may not be reproduced other than initial, single withdrawal prior written permission of Reliable Calibration & Measurements Laboratory.


Reliable Laboratory B-7, Sultan Khalifa Al Nahdher Street road, Badi Al Haraz, P.O.Box: 59058, Dubai, U.A.E.

Page 1 of 2



**RELIABLE**  
CALIBRATION AND MEASUREMENTS LABORATORY

مختبر المعايرة والمقاييس  
ب.ت. سلطان Khalifa Al Nahyan Show room, Road Al Hamra, P.O.Box : 88848, Dubai, U.A.E, Tel : +9742898955, E-mail : lab@reliablegulf.com, Web : www.reliablegulf.com



**RELIABLE**  
CALIBRATION AND MEASUREMENTS LABORATORY

مختبر المعايرة والمقاييس  
ب.ت. سلطان Khalifa Al Nahyan Show room, Road Al Hamra, P.O.Box : 88848, Dubai, U.A.E, Tel : +9742898955, E-mail : lab@reliablegulf.com, Web : www.reliablegulf.com



**RELIABLE**  
CALIBRATION AND MEASUREMENTS LABORATORY


مختبر المعايرة والمقاييس  
ب.ت. سلطان Khalifa Al Nahyan Show room, Road Al Hamra, P.O.Box : 88848, Dubai, U.A.E, Tel : +9742898955, E-mail : lab@reliablegulf.com, Web : www.reliablegulf.com

### CERTIFICATE OF CALIBRATION

ISSUED BY : RELIABLE CALIBRATION & MEASUREMENTS LABORATORY  
DATE OF ISSUE : 22-08-2022

REQUEST NO. : R22299  
CERTIFICATE NO. : RA22299-02

OFF Center Error:



Position 1 (kg)	Position 2 (Center) (kg)	Position 3 (kg)
41900	41980	41980


Sensibility Test : 72280 kg						
Truck	1	2	3	4	5	Average
Indicated weight in kg	72280	72280	72240	72260	72240	72242

Before Adjusting					
Nominal Mass in (kg)	1000	12000	24000	48000	72000
Weightbridge Ind. in (kg)	1000	12000	24000	47980	71980

Weighbridge Adjusted	
Yes	No
✓	

After Adjusting				
Applied Nominal Mass in (kg)	Weightbridge Indication in (kg)	Error in (kg)	Uncertainty in (kg)	Relative Uncertainty
1000	1000	0	80.0	0.08-03
12000	12000	0	80.0	1.88-03
24000	24000	0	80.0	3.33-03
48000	48000	0	80.0	1.66-03
72000	72000	0	80.0	1.33-03
96000	95980	-20	80.0	3.45-04
120000	119980	-20	80.0	3.33-04

\*\*\* End of Certificate \*\*\*



### CERTIFICATE OF CALIBRATION

ISSUED BY : RELIABLE CALIBRATION & MEASUREMENTS LABORATORY  
DATE OF ISSUE : 22-08-2022

REQUEST NO. : R22299  
CERTIFICATE NO. : RA22299-01

Calibration Date : 19/06/2022

Client Details :  
Al Dhahra Recycling Industries LLC.  
P.O. Box No: 51728, Abu Dhabi, UAE.

Recommended Due Date : 18/02/2023 (As Requested by the Customer)

Environmental Conditions :  
Temperature : 35.2 ± 0.5 °C  
Relative Humidity : 64 ± 10%  
Atmospheric Pressure : 998 ± 0.04 mbar

Location : VAB 1

Details of the equipment (EUT):  
Equipment : Electronic Weightbridge  
Capacity : 120000 kg  
Manufacturer : Central  
Model No. : 210  
Serial No. : E0018-0033

Method Used For Calibration :  
ACM, WP-02 (Based on Euler's up to 10 V/O)


Reference Used For Certification :  
Standard Test weights, Certificate No. RA21365-01  
(Calibrated by SINAC accredited laboratory, traceable to National & International standards).

Traceability :  
All measuring equipment used for calibration purposes is traceable to Nationally or Internationally recognized accredited Standards Laboratory through approved accreditation bodies.

Uncertainty Statement :  
The uncertainty reported is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%.

Calibrated By (Cal. Eng.) : Abdul Gaffar

Approved by (Quality Manager) : Sharmila Kumar




\*\*\* End of Certificate \*\*\*

### CERTIFICATE OF CALIBRATION

ISSUED BY : RELIABLE CALIBRATION & MEASUREMENTS LABORATORY  
DATE OF ISSUE : 22-08-2022

REQUEST NO. : R22299  
CERTIFICATE NO. : RA22299-03

OFF Center Error:



Position 1 (kg)	Position 2 (Center) (kg)	Position 3 (kg)
42780	42800	42820


Sensibility Test : 70600 kg						
Truck	1	2	3	4	5	Average
Indicated weight in kg	70600	70600	70600	70580	70600	70598

Before Adjusting					
Nominal Mass in (kg)	1000	12000	24000	48000	72000
Weightbridge Ind. in (kg)	1000	12000	24000	48020	72020

Weighbridge Adjusted	
Yes	No
✓	

After Adjusting				
Applied Nominal Mass in (kg)	Weightbridge Indication in (kg)	Error in (kg)	Uncertainty in (kg)	Relative Uncertainty
1000	1000	0	80.0	0.08-03
12000	12000	0	80.0	1.88-03
24000	24000	0	80.0	3.33-03
48000	48000	0	80.0	1.66-03
72000	71980	-20	80.0	1.33-03
96000	95980	-20	80.0	3.45-04
120000	119980	-20	80.0	3.33-04

\*\*\* End of Certificate \*\*\*



SCS-2 (REV) 11/17 Rev. 02 Date 04-08-2019

Page 2 of 2

SCS-2 (REV) 11/17 Rev. 02 Date 04-08-2019

Page 1 of



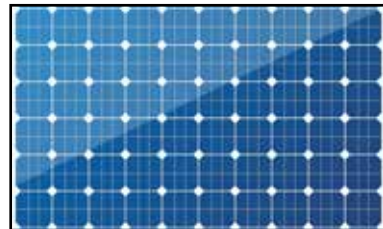


# Recognitions and Awards





# Recognitions and Awards



HOME / ENERGY

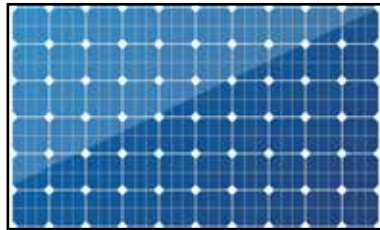
## Tadweer opens phase two of solar power plant at Al Dhafra

The Abu Dhabi Waste Management Center (Tadweer) has announced the opening of the second phase of the solar power plant project at the Construction and Demolition Waste Recycling Facility in Al Dhafra region of Abu Dhabi.

Aimed at lowering the facility's carbon footprint, Al Dhafra C&D Waste Recycling Facility, the first of its kind in the world to be 90 per cent solar-powered, is aligned with the country's ambitious plans to mitigate climate change including the UAE Green Agenda Programs (2030-2015) and the National Climate Change Plan of the UAE (2050-2017),

With completion of the second phase, Tadweer, in close coordination with the investor of Al Dhafra C&D Waste Recycling Facility, has significantly enhanced the facility's solar energy utilization by increasing its capacity to 600 kilowatts per hour, up by 350 kilowatts per hour.

In addition to enhancing the facility's operational efficiency, the increased capacity will help lower its carbon footprint by avoiding more than 1,300 tons of carbon emissions, equivalent to planting 4,133 trees, and saving 480,000 liters of diesel on a monthly basis. This will significantly contribute to protecting the emirate's environment and cutting harmful emissions.



[HOME](#) / [UAE](#)

## 350kwph solar power added to Abu Dhabi's Al Dhafra recycling facility

To raise the efficiency of the power plant, Tadweer installed 1,656 solar cells at an area covering 11,000 square meters, with a capacity to produce a total 600 kilowatts, equivalent to generating 878,000 kilowatts energy from diesel, saving an annual diesel consumption of up to 480,000 liters. This will help prevent an average of 1,300 tons of carbon emission per year.

As part of its continued efforts to promote sustainable energy at its various facilities, Tadweer has adopted a strategy to increase the use of clean energy sources at its current and future projects, and has outlined ambitious plans to achieve its sustainable objectives.

Khaleej Times Business Energy - On September 7, 2020. Tadweer opens phase two of solar power plant at Al Dhafra C&D waste recycling facility.



















# Projects



# Examples of Live Projects 2022

Project Name	Project Location	Scope of Work
1. P-091 - FIBREX_North Yas Development Yas Living (NOYA 1)	Yas Island	Supply of RCA Ex-plant
2. Hpes-Carleigh School-Koora Sport Center /HPES Al maryah island project	Al Maryah Island	Supply of RCA Ex-plant
3. Riyadh City South Ph.1 -N2- J-262	Riyadh City	Supply of RCA Ex-plant
4. Jubail island & Abu Dhabi projects	Jubail Island	Supply of RCA Ex-plant
5. Improvement Of E11/E12 Intersection Between Al Falah And Al Falah And Al Reef - Section 1 (PA129).	AL Reef	Supply of RCA Ex-plant
6. Construction of roads and infrastructure works at MBZ city	MBZ City	Supply of RCA Ex-plant
7. Walk Ways & Cycle Track in the Al Dhafra Region Cities (P33)	Ruwais+D10:D11-Ghayathi	Supply of RCA Ex-plant
8. Mid field terminal -AUH	Auh-Airport	Supply of RCA Ex-plant
9. Riyadh city north ph-7A / Infrs.works at kizad area A ph.1-d	Riyadh City	Supply of RCA Ex-plant
10. Various projects in Abu Dhabi	Abu Dhabi	Supply of RCA Ex-plant
11. TG2066 - Baniyas North Infrastructure, Streetscape and Vill	Baniyas	Supply of RCA Ex-plant
12. Riyadh City South Phase 2, Neighborhood 4 – Infra	Riyadh City	Supply of RCA Ex-plant

## Type of Material

Recycled crushed  
Aggregate  
Subbase/Base  
Course (37.5-0 mm)  
(Dry Mix)



## Project Name

## Project Location

## Scope of Work

13. I045 - Riyadh City North Phase 6 (6A & 6B) Infrastructure	Riyad City	Supply of RCA Ex-plant
14. Etihad Rail Network project Stage 2 Package (2c)/Riyadh City South Phase 3 Project	Riyad City	Supply of RCA Ex-plant
15. Riyadh City North - Phase 7B	Riyad City	Supply of RCA Ex-plant
16. Riyadh City South - Phase 4 (Nurol)	Riyad City	Supply of RCA Ex-plant
17. Riyad City South-Ph.01-N3 -NBHH Project /Riyadh City North - Phase 7B/	Riyad City	Supply of RCA Ex-plant
18. Early Works & Site Preparation for Borouge 4 Project	Ruwais	Supply of RCA Ex-plant
19. Qasr Al Sarab Desert Resort Road	Liwa	Supply of RCA Ex-plant
20. Brouge project ruwais	Ruwais	Supply of RCA Ex-plant
21. Infrastructure works at MBZ city /Riyad City South phase -4 nurol- N-10 project.	Riyad City	Supply of RCA Ex-plant
22. Various projects in Abu Dhabi	Abu Dhabi	Supply of RCA Ex-plant
23. Various projects in Abu Dhabi	Abu Dhabi	Supply of RCA Ex-plant
24. Various projects in Abu Dhabi	Abu Dhabi	Supply of RCA Ex-plant

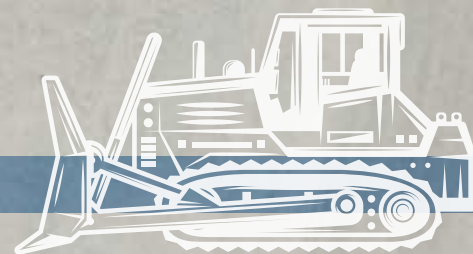
## Type of Material

Recycled crushed  
Aggregate  
Subbase/Base  
Course (37.5-0 mm)  
(Dry Mix)











# Contact Us

## Al Dhafra Recycling Industries LLC

 +971 2 585 1050

 +971 2 585 1160

 P.O. Box 91728, Hameem Road, E65, Plot P3, Al Shanayan, Abu Dhabi, United Arab Emirates

 [info@adri.ae](mailto:info@adri.ae)

 [www.aldhafrarecycling.ae](http://www.aldhafrarecycling.ae)







In partnership with Tadweer