

بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ

PRESENTATION

TO

GHULAM ISHAQ KHAN UNIVERSITY

ON

**SOLAR ELECTRIC VEHICLES
MANUFACTURED AND DESIGNED**

BY

M. ASLAM AZAD

(MEMBER OF American Society of Heating Refrigeration & Air Conditioning Engineers)

MANAGING DIRECTOR AGECO (Pvt) Ltd.

ECONOMIA



TOPICS

1

1. **Company Profile**
2. **Promo Video Clip**
3. **Types of Solar Electric Vehicles.**
4. **Manufacturing Raw Material.**
5. **Development Analysis by FYP's.**
6. **Approval of Standards by PSQCA.**
7. **Design Patent for Solar Electric Car**
8. **Design Status for Solar Electric Golf Cart**
9. **Public Sharing by EXPO.**
10. **Current Status.**
11. **Near Future Plan for Marketing.**

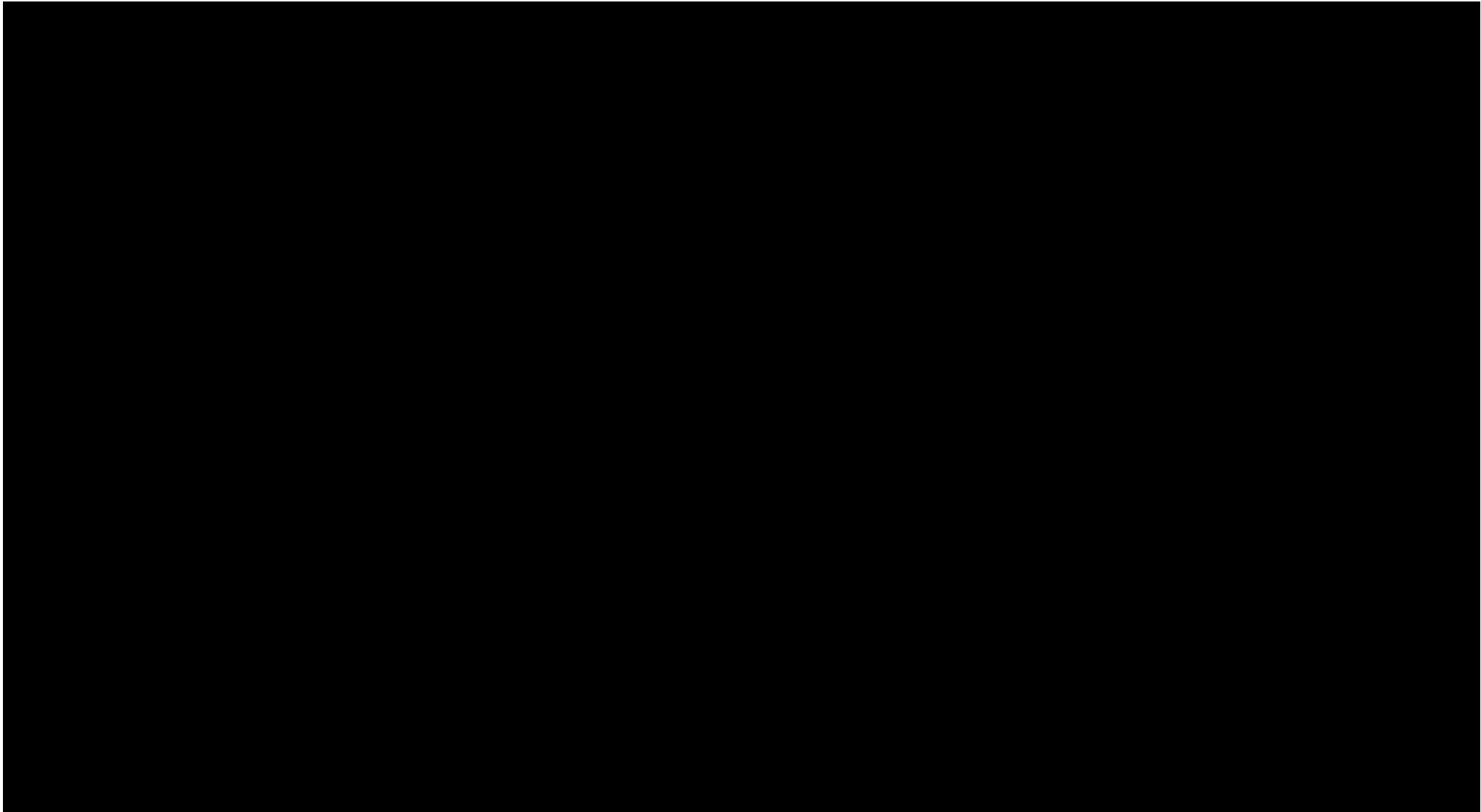




THE PIONEER OF
RISKLESS & ENERGY SAVING CENTRAL HEATING SYSTEM
INTRODUCTION OF COMPANY/CAPABILITIES

- ❖ The company was established with the name of “**AGECO**” in 1980.
- ❖ Registered as **AGECO (Pvt.) Ltd., in 1988.**
- ❖ We have completed **50 HVAC Projects** in Government and Semi Government sectors all over the country.
- ❖ We are The Pioneers in introducing designing and Manufacturing of “**ECONOMIA**” **Riskless & Energy Saving Central Heating System in Pakistan Since 1997** and to adopt same pattern of heating which has been used in Europe and other Countries in the World.
- ❖ We have since installed various systems successfully in defense organizations:
 - a. Pakistan Navy**
 - ✓ 28 Senior Officers Houses
 - b. Pakistan Air Force**
 - ✓ Air Head Quarter,
 - ✓ Mess
 - ✓ V.V.I.P Lounge Chaklala
 - c. Pakistan Army**
 - ✓ 7 CMH Hospitals
 - ✓ Northern Areas
 - ✓ 323 Brigade/62 Brigade
 - ✓ Gomma, Sixsa
 - ✓ 200 Bedded MH Hospital
 - ✓ 12-Div, 6 Armor brigade
 - ✓ Number of Cadet Colleges
 - ✓ EinCs Branch, GHQ
 - ✓ FWO
 - ✓ NDU
 - ✓ SCO Head Quarter
- ❖ We have also installed our various systems at more than **25000** Locations including **Hospitals, Commercial Buildings, Guest Houses, Hotels & Residences** all over the country where ambient temp is up to (-)25 °C and altitude up to 14000ft.
- ❖ We are the pioneers to develop Solar Electric Energy Vehicle without Engine and Lithium Ion battery.
- ❖ **Future Focus to convert energy technology to support Pakistan and people of Pakistan by reducing pollution, import oil bill and low maintenance / running costs.**

PROMO VIDEO CLIP



TYPE OF SOLAR ELECTRIC VEHICLES



SOLAR ELECTRIC
GOLF / PASSENGER CART



SOLAR ELECTRIC CAR
(4-DOOR)



SOLAR ELECTRIC CAR
2-DOOR



SOLAR ELECTRIC SHUTTLE
11-15 SEATER



SOLAR ELECTRIC VAN
(A).LOADING, (B).MILK SUPPLY, (C).13 SEATER PASSENGER



SOLAR E-BIKE



1. **85% Raw Material is being used locally.**
2. **15% cost of raw material is being imported:**
 - a. **Flexible solar cell and accessories.**
 - b. **Lithium Ion Cell for battery but designed, assembled and manufactured including BMS by ECONOMIA.**
 - c. **DC Motor with controller is imported as per ECONOMIA designed on OEM basis.**



DEVELOPMENT ANALYSIS BY FYP'S

We have involved top leading universities for analysis by assigned FYP since 2011 of each developed product under supervision of coordinator PHDs and after satisfied result added in utility part of production.



APPROVAL OF STANDARDS BY PSQCA

- We have made public introduction 1st time through EXPO of REAP, IAP and COMSATS in March 2014.
- Got its Technology Patent No. 09/08/2014.
- Got its Design Patent No. 09/08/2014.
- We got approval for Safety Standards from PSQCA on Dated: 26/10/2014.
- We got approval for manufacturing standards from PSQCA on Dated: 28/02/2015.
- NOC issued by NSC (National Standard Company) Dated: 06/04/2015.



COPY OF PATENT DOCUMENTS

GOVERNMENT OF PAKISTAN
THE PATENT OFFICE

CERTIFICATE OF REGISTRATION OF DESIGN

Design No. 17369- D
Dated: 11/08/2014

Certified that the design, of which a copy annexed hereto, has been registered as of the number and date given above in respect of the application of such design "Solar Car (Class-01)" in the name of **Muhammad Aslam Azad**, a Pakistani national resident of H.No.267, Street No.6 Street No.6, Sector F-10/3 Islamabad, Pakistan, in pursuance and subject to the provisions of the Patents and Designs Rules 1933 and the Registered Designs Ordinance, 2000.

(Signature)
(Syed Nasrullah)
Registrar of Designs

Date of issue of certificate: 21/08/2014
Address for service:-
Ali & Associates
First Floor, Shaheen Towers, 23-A, Block-6, P.E.C.H.S, Shakra-e-Faisal, 75400, Karachi, Sindh

All communications should quote the number of this certificate and should be addressed to:
Registrar of Designs,
The Patent Office, Karachi.

(Copyright in the design will subsist for ten years from the date registration and may, under the terms of the Patents and Designs Rules 1933 and the Registered Designs Ordinance, 2000, be extended for two further periods each of ten years.)

15602014

Muhammad Aslam Azad, Islamabad

Total Sheets: 04
Sheet No: 01
Design App. No: 17369-D
Dated: 11-08-2014
Class: 01




FIG-1 [Front View]

Endorsement: The novelty resides in the shape and configuration of the "Solar Car" as illustrated in the representations.

Disclaimer: No claim is made by virtue of this registration in respect of any mechanical or other action of the mechanism whatsoever or in respect any mode or principal of construction of article.

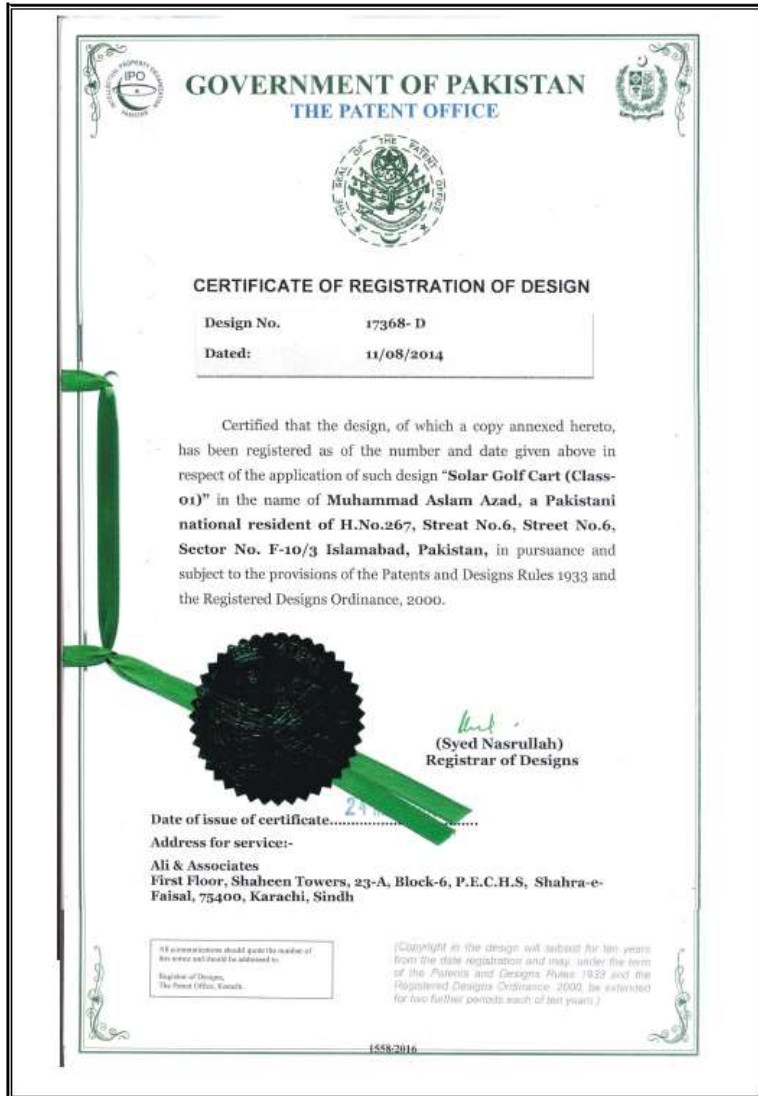
No claim is made by virtue of this registration in respect of any trademark, word, and label appearing on the Solar Car.

Dated this 11th day of August, 2014

(Signature)
Saira Amjad
Agent for the Applicant



COPY OF PATENT DOCUMENTS



FBR CERTIFICATES FOR THE DETERMINATION OF LOCAL MANUFACTURER

10

GOVERNMENT OF PAKISTAN
REVENUE DIVISION
FEDERAL BOARD OF REVENUE

C.No.2(5)Mach./99/17026

Islamabad, dated 11th December, 2014.

The Collector,
Model Customs Collectorate,
Custom House, Islamabad.

Subject: **DETERMINATION OF LOCAL MANUFACTURING STATUS**

Please refer to the subject cited above and find enclosed copy of Engineering Development Board's letter No. EDB-PL/01/14-Tech.II, dated 27th November, 2014 in respect of M/s AGECO (Pvt) Ltd., for necessary action under the law.

2. The admissibility of the concession and fulfillment of other requirements shall be determined and ensured by the Collectorate.

Encl: As above

(Muhammad Haris Ansari)
Secretary (Tariff-II)

Copy to M/s Ageco (Pvt) Ltd., 7 & 8, 1st Floor, Hill View Plaza Blue Area, Islamabad.

(Muhammad Haris Ansari)
Secretary (Tariff-II)

GOVERNMENT OF PAKISTAN
REVENUE DIVISION
FEDERAL BOARD OF REVENUE

C.No.2(5)Mach./99/177969

Islamabad, dated 18th December, 2014.

The Collector,
Model Customs Collectorate of Appraisal (West),
Custom House, Karachi.

Subject: **DETERMINATION OF LOCAL MANUFACTURING STATUS**

Please refer to the subject cited above and find enclosed copy of Engineering Development Board's letter No. EDB-PL/01/14-Tech.II, dated 27th December, 2014 in respect of M/s Ageco (Pvt) Ltd., for necessary action under the law.

2. The admissibility of the concession and fulfillment of other requirements shall be determined and ensured by the Collectorate.



Encl: As above

(Muhammad Haris Ansari)
Secretary (Tariff-II)

Copy to M/s Ageco (Pvt) Ltd., 7 & 8, 1st Floor, Hill View Plaza Blue Area, Islamabad.

(Muhammad Haris Ansari)
Secretary (Tariff-II)

EDB CERTIFICATE FOR THE DETERMINATION OF LOCAL MANUFACTURER

 **Engineering Development Board**
Ministry of Industries & Production
Government of Pakistan 

16053

EDB-PL/01/14-Tech.II
November 27, 2014


DETERMINATION OF LOCAL MANUFACTURING STATUS
M/s AGECO (Pvt) Ltd

Enclosed please find copy of M/s AGECO (Pvt) Ltd., letter No. AGE-EDB/2512PIL/14 dated 03.10.2014, concerning the subject matter.

02. Based on the confirmation received from the local industry, it is conveyed that "Lithium Ion Battery Cells", being imported by M/s AGECO (Pvt) Ltd., are **not** being manufactured locally.

03. The admissibility of other relevant conditions of 5th schedule and Import Policy Order are to be determined by FBR.


Best regards,


(Mirza Nasir Baig)
Incharge (Tariff)

The Secretary (Tariff-II)
Federal Board of Revenue
Islamabad

cc:

Mr. M. Aslam Azad
Chief Executive
Ageco (Pvt) Ltd
7 & 8, 1st Floor, Hill View Plaza Blue Area
Islamabad
Tel: 051-2823336/ 2872988
Fax: 051-2270120


ID25116781

StDC Building (5/F), 3-A, Connaught Avenue, Islamabad. Tel: (92-51) 9205995-98, Fax: (92-51) 9205324, 9200181
www.edb.gov.pk



PUBLIC SHARING BY EXPO

- 1st Public/Media Sharing through Expo REAP Dated: 22-24th Mar, 2014.
- 2nd Expo IAP at Tulip Motel Dated: 11-13th April, 2014 .
- 3rd COMSATS at Pak-China Expo Center Dated: 21-24th Mar, 2014.
- 4th HVACR Expo at Lahore Dated: 3-5th April, 2014.
- 5th COMSATS Expo at Pak-China Expo Center Dated: 27-30th March, 2015.
- 6th REAP Expo at Pak-China Center Dated: 2-4th April, 2015..
- 7th REAP Expo at Pak-China Center Dated: 5-7th March, 2016.
- 8th RCCI Expo at Topi Rakh Auditorium Dated: 13-15th May, 2016.
- And many more....



We are providing vehicles to Pak Navy, Army and Air Force through DGDP as well as direct purchase. We have also supplied vehicles to COMSATS Islamabad, SPD.



NEAR FUTURE PLAN FOR MARKETING

14

We are ready to take booking of the vehicles and are in progress of establishing our new production setup of 100 vehicles/day and sale will be made through franchises by setting their sale & service center. However, we have already signed an agreement with CSD for the lease of solar vehicles to armed forces personnel through 130 outlets all over Pakistan.



ECONOMIA[®]

PAKISTAN'S SOLAR CAR

NO FUEL

NO TENSION

NO POLLUTION

THANK YOU

SOLAR ELECTRIC CAR

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