الاتحاد
Etihad
لخدمات الطاقة
Energy Services

SOLAR CERTIFICATIONS GUIDELINES

THE BACKGROUND

We recognize that preserving our energy resources will be one of the greatest challenges in our drive towards sustainable development. This, however, will not materialize unless the different facets of our society adopt energy conservation principles in their core values. The future generations will be the chief beneficiary of our achievements and the best judge of what we accomplish in this field.

His Highness Sheikh
Mohammed bin Rashid Al Maktoum
Vice President and Prime Minister
of the UAE and Ruler of Dubai

THE BACKGROUND

المجلس الأعلى للطاقة
Supreme Council of Energy

Dubai Supreme Council of Energy (DSCE), chaired by His Highness Sheikh Ahmed Bin Saeed Al Maktoum, developed the Dubai Integrated Energy Strategy (DIES 2050) to set the strategic direction towards secure and sustainable energy supply and demand. This strategy reflects the principle of integration addressing supply, managing demand with the Dubai Demand Side Management Strategy (DSM 2030) and creating a sustainable and green economy.

WHO IS THIS GUIDEBOOK FOR?

This guidebook is a general guidebook
that can be used by any organization (governmental, commercial, industrial)
seeking to improve energy performance.

It can be used by higher management, operations managers, engineers, and all others trying to establish their energy conservation plan to manage energy consumption.

ETIHAD ESCO VISION

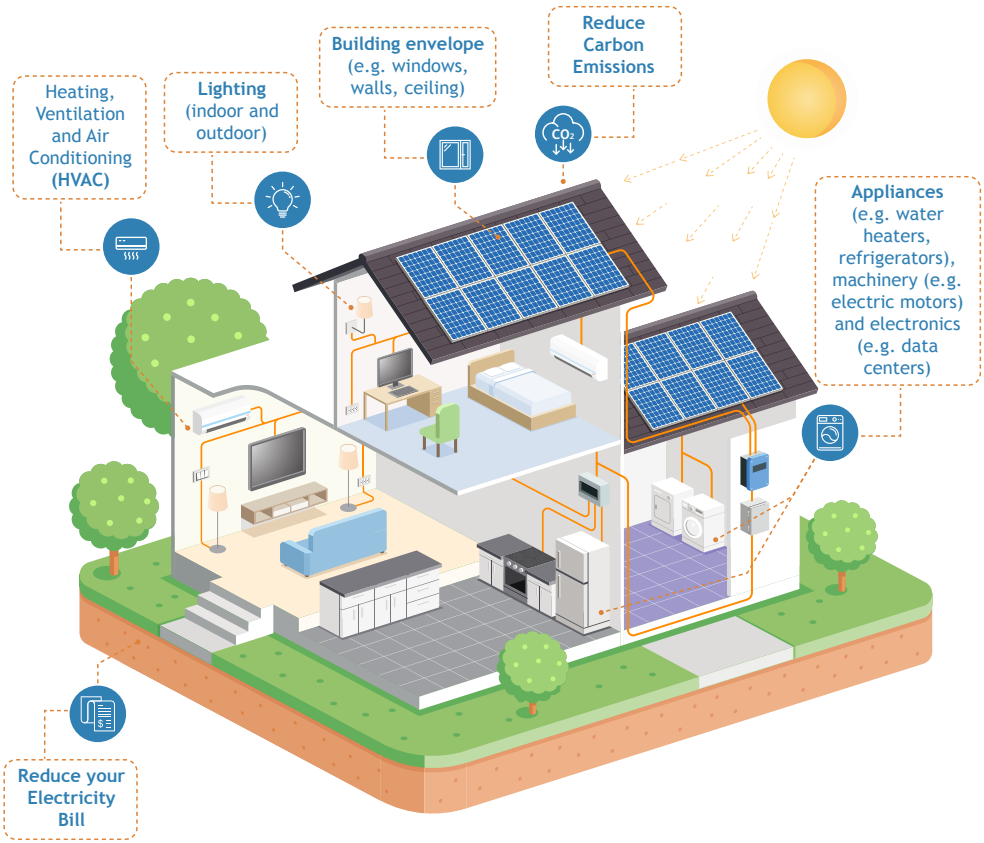
To make Dubai one of the most sustainable cities in the world.

ETIHAD ESCO MISSION

To make Dubai built environment a leading example of energy efficiency for the region and the world.

INTRODUCTION TO SOLAR PV SYSTEM

Solar photovoltaic systems, commonly referred to as solar PV systems, convert sunlight directly into electricity. This is different to the solar thermal collectors for solar water heaters. A solar PV system can help reduce carbon emissions and your electricity bill by producing sustainable electricity from the sun instead of burning fossil fuels



BENEFITS FROM A SOLAR IMPLEMENTATION

Due to the harmful greenhouse gases emissions from burning fossil fuels, the demand for renewable energy has been increasing. The sun's heat and light provide an abundant source of energy that can be harnessed if used correctly.

Energy conservation should be a priority for everyone, as a nation, as companies and individuals.

What are the benefits to energy conservation?

ECONOMIC

Helps organizations save money by reducing energy costs thereby increasing profitability

SOCIAL

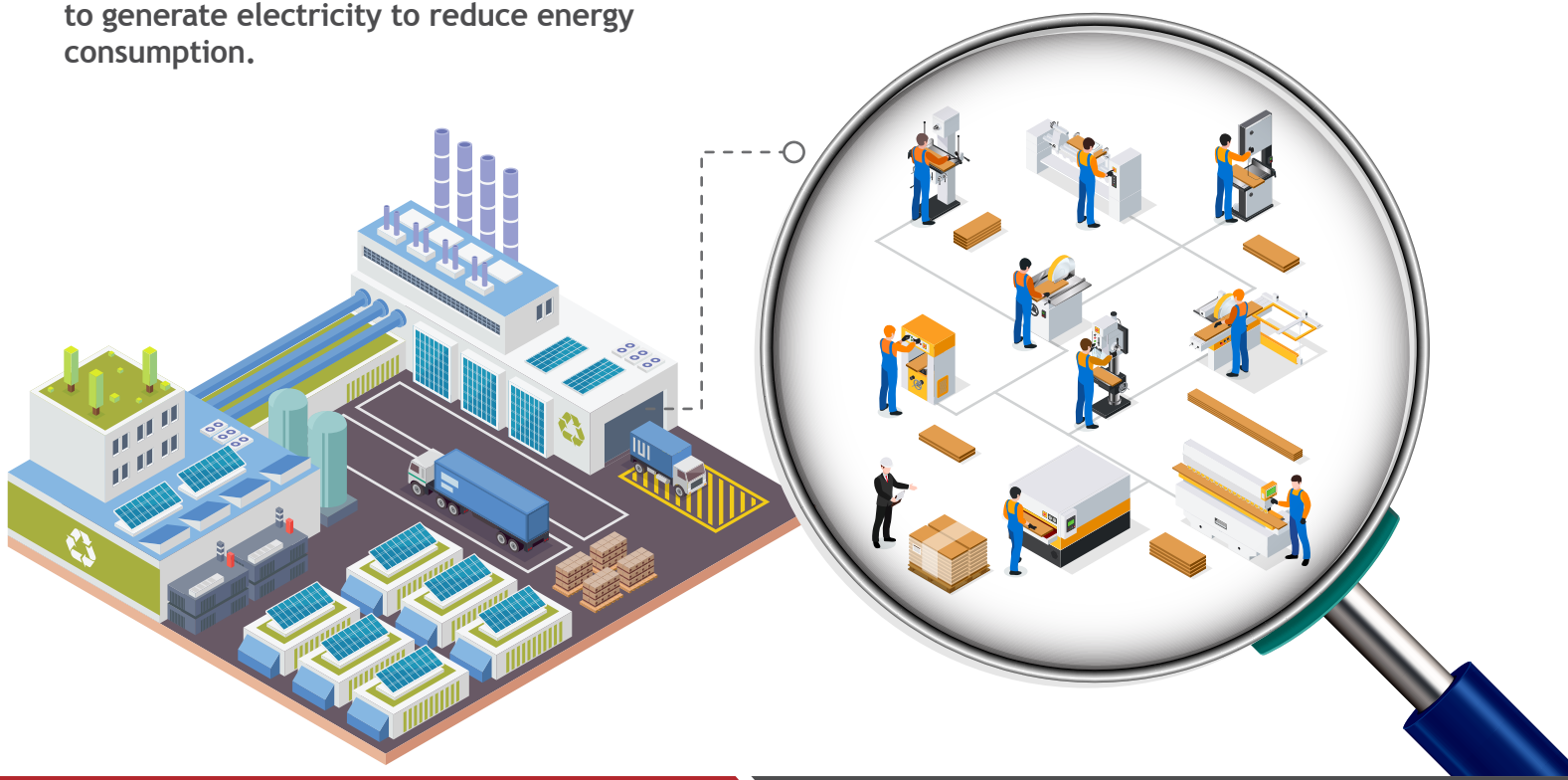
Helps organization improve their brand reputation and social responsibility

ENVIRONMENTAL

Reduces emissions of carbon dioxide and other greenhouse gases (GHGs) and slows down the global warming and climate change

SOLAR CERTIFICATION..

We do certify solar energy plants on facilities (rooftop, carparks or ground-mounted) to generate electricity to reduce energy consumption.



KEY BENEFITS OF SOLAR CERTIFICATION

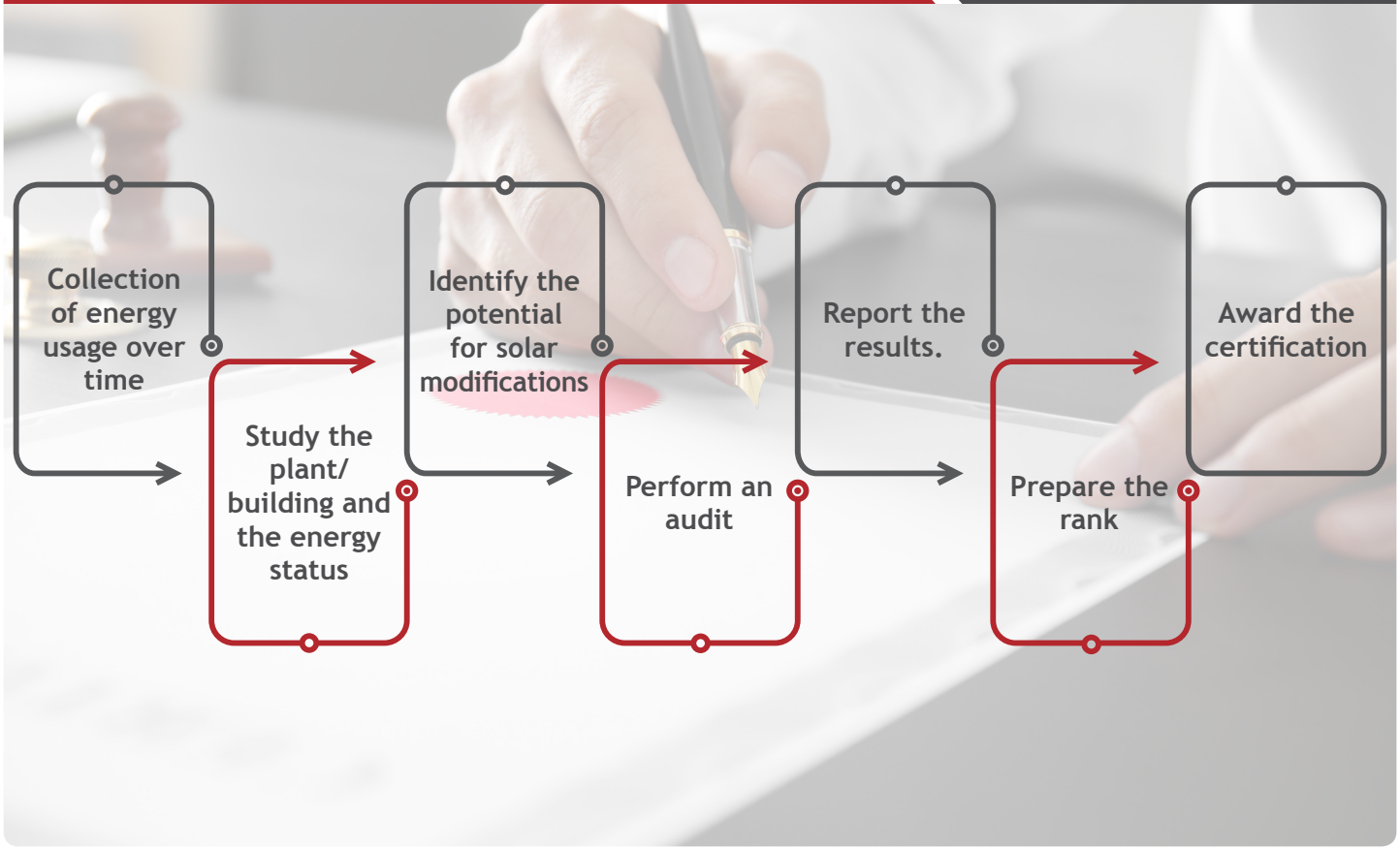
The seal proves that certain Solar energy produced

The final customer knows that he acquires products services of an entity that produces energy using solar panels and reserves environment and that the carbon footprint is lower compared to others

Consumers responsible for the environment, in this way, are confident that products services of facilities with solar panels reducing

Solar certified companies become connected environmentally impact on environment with their customers increasing their loyalty

CERTIFICATION METHODOLOGY



CERTIFICATION PROCESS

1

- Etihad ESCO concedes a previous certificate after a proper inspection at site.

2

- Etihad ESCO gathering all documents;
- Checking all documentation;
- Testing proper functioning Solar installation.

3

- Etihad ESCO certifies “Solar Certification”, based on the audit.
- Comparison of previous and current electricity consumption;

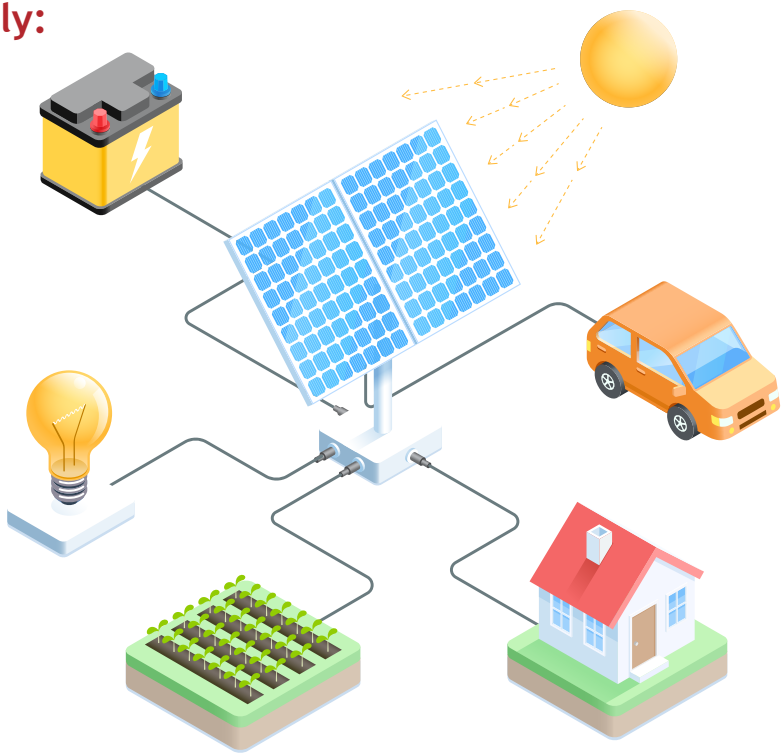
4

- Solar Certification to be renewed every 3 years.

STEP 1- WHAT WE CHECK

Etihad ES to carry a proper inspection of the implemented solar plant, mainly:

- PV modules installation
- LV terminations
- Inverter installation
- Monitoring system / SCADA
- O&M Plan

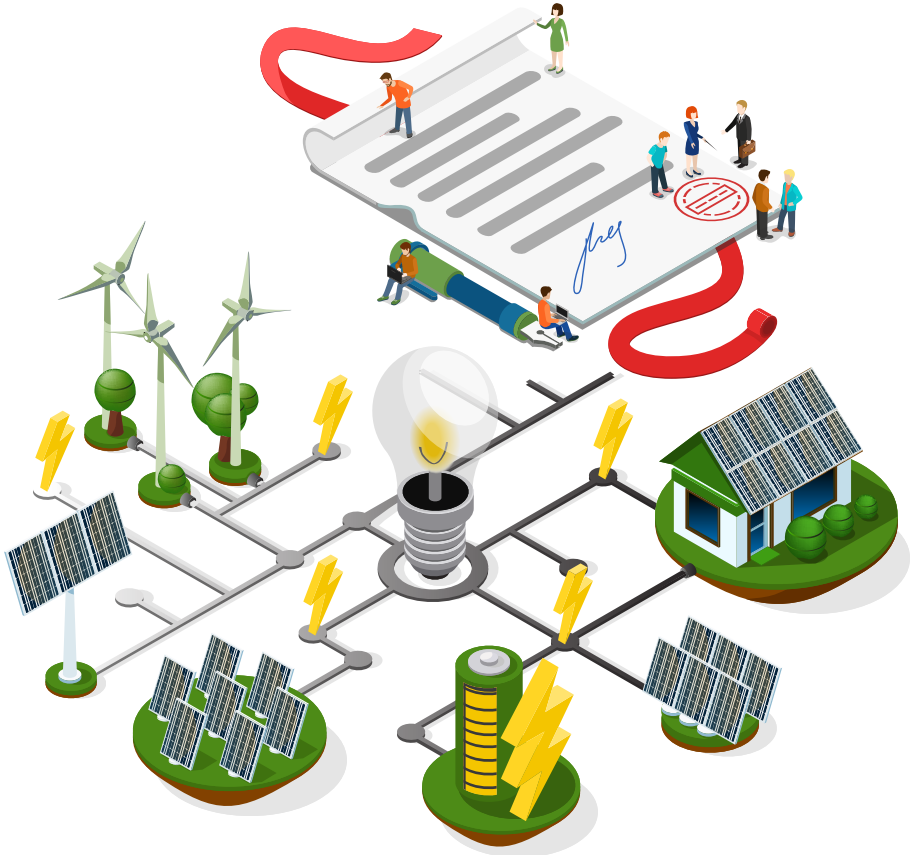


STEP 2 – DATA COLLECTION

- Monthly electricity consumption (minimum 1 year)
- Monthly solar energy generation (minimum 1 year)
- Energy Saving profile over the period from the solar energization (minimum 1 year)

STEP 3 – REPORT AND CERTIFICATION

- Solar PV plant status (Performance, Recommendation for improvements and optimizations if required)
- Application of Shams Dubai
- Complete Report issuance
- Certification



STEP 4 – PERIODICALCERTIFICATION RENEWAL

Solar Certification to be renewed **every 3 years in order** to check if any change occurred during that period, both in generation and consumption profile.

MEASURE AND MONITOR

REPORT

A RECALCULATE ACTUAL ENERGY SAVINGS FROM SOLAR IMPLEMENTATION AND ACTUAL CONSUMPTION PROFILE

B RE-AUDITING

C DEVELOP SOLAR AUDIT REPORT

CRITERIA OF CERTIFICATION

Solar Certified. 10% - 25% of the total demand covered by Solar Energy	10% - 25%
Solar Certified Silver. 25% - 50% of the total demand covered by Solar Energy	25% - 50%
Solar Certified Gold. 50% - 75% of the total demand covered by Solar Energy	50% - 75%
Solar Certified Platinum. 75% - 100% of the total demand covered by Solar Energy	75% - 100%

RIGHTS OF THE SEAL

- For all users who are interested in Solar certified Seal it is forbidden to use the seal without a prior approval of Etihad ESCO. Etihad ESCO will release the seal only upon the above described Solar Certification Audit.

SHAMS DUBAI CERTIFIED

SHAMS DUBAI SILVER

SHAMS DUBAI GOLD

SHAMS DUBAI PLATINUM

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