Replacing Old Air Conditioners will Lead to 70% Savings in Cost of Energy in UAE

Daikin's new high efficiency systems offer 90% fuel utilization

Dubai___ March, 2017

It is estimated that up to 70% of residential electricity bill comes from the use of Air Conditioning. Replacing an air conditioner may seem like a non-urgent and expensive task. But in the long run, according to Daikin, the world's leader in manufacturing and production of cooling and heating solutions, prolonging the use of an old air conditioner will result in high energy bills and be detrimental to any sustainability and energy conservation initiatives.

Generally, a high-quality air conditioner can last for up to 15 years if it is maintained properly through regular servicing including the cleaning and changing of filters, coils, and in some cases a refrigerant change. However, "This will only take you so far," stressed *Nabil Shahin, Director of Product Planning and Marketing at Daikin Middle East & Africa*. "If you have a very old air conditioner, especially one that is using HFC refrigerant, it consumes more energy resulting in higher operational costs, and emits more CO_2 into the environment. At this point it is better to replace the old unit with one that is more efficient on power consumption and uses green refrigerants such as R-32 that are considered safer for the environment," he continued.

Air conditioning has become a necessity in the UAE, but its use and consumption leads to large energy bills for households and significant pollutant contribution to the atmosphere. However, by selecting the correct air conditioner, these two issues can be significantly reduced without compromising on quality or comfort.

High efficiency new air conditioning systems can save thousands of Dirhams in fuel and thereby energy costs as they operate at 90% annual fuel utilization efficiency (AFUE) compared to older systems that operate at around 65%, with the remaining 35% simply lost. "This is obviously an efficiency issue leading to energy wastage and global warming. The new high efficiency models are great for household energy budgets, business profits, and the environment," commented *Nabil Shahin.*

Explaining further how the newer models can contribute to energy cost savings *Nabil* pointed to the use of inverter technology: "The newer models of air conditioners use inverter technology which uses smart electronic controls to modulate the speed of the compressor and fans based on demand and outdoor temperature." As a result, an air conditioning unit with this technology runs at lower speeds during the low heat season and consumes less electric power, compared to old systems that run at full speed regardless of external temperature.

Another feature that assists in energy savings and conservation are programmable thermostat systems. "Programmable thermostat systems provide unprecedented control over temperatures in specific zones of a house. Inevitably some rooms need to be heated or cooled more than others or completely turned off, and zoning can provide energy savings alongside the comfort of consistently optimal temperatures. The ability to pre-program temperatures at different times of the day and different days of the week is also ideal for people who are away from home for set periods of time or will leave for extended vacations. Homeowners can save annually in energy costs just through proper use of a programmable thermostat,'' explained Nabil Shahin.

However, Nabil Shahin said the most efficient conventional air conditioners are those that "Use both variable refrigerant volume (VRV) and variable refrigerant temperature (VRT) technologies, which can provide an additional 28% energy savings on top of the inverter type systems, and up to 70% over the old non-inverter systems."

About Daikin

Daikin Industries is the World's HVAC Leader with more than 60,000 employees worldwide. Daikin is engaged primarily in the development, manufacture, sales and aftermarket support of air conditioning, heating, ventilation, refrigeration equipment, refrigerants and other chemicals, as well as oil hydraulic products. Daikin Industries is headquartered in Osaka, Japan, with more than 80 Global product bases & presence in more than 145 countries.

Daikin Middle East & Africa promotes and provides aftermarket support for a full range of air conditioning equipment and systems in UAE, GCC, Middle East and Africa region.