





# GENERAL CONSERVATION TIPS

DEWA's motto: For generations to come

### **INDEX**

IMPORTANT TIPS TO FOLLOW	02
AIR CONDITIONING	02
LIGHTS	03
BATHROOMS	04
KITCHENS	05
LAUNDRY	07
GARDENING	
OUTDOORS	10
CONSERVATION TIPS WHEN BUILDING A NEW HOME	11
SOME WATER-AND ENERGY-SAVING DEVICES AND APPLIANCES	12
CONSERVATION TIPS AT THE OFFICE	13
CONSERVATION TIPS WHEN YOU ARE AWAY ON HOLIDAY	14
SOME ECO-FRIENDLY TIPS	15
WORK TOGETHER WITH US	16
HAPPINESS BEGINS WITH SMART LIVING AND SMART CHOICES	17

**Disclaimer:** This booklet is a general guideline about household energy and water efficiency only. It may contain errors and omissions and may not be suitable for the circumstances of some households. The services of a competent professional should always be sought before any actions are taken in relation to household energy and water efficiency. The publisher of this booklet and Individual contributors do not accept liability in any way for any errors or omissions in the booklet and do not accept any liability to any person in respect of anything done directly or indirectly by a person in reliance upon whole or any part of this booklet.

### **INTRODUCTION**

Water and energy resources on our land are God's gift to all humankind. Clean water flowing from our taps, electricity illuminating our homes and guiding our way on the streets at night, cooking our meals with gas, are some of the blessings and comforts that we should not take for granted.

Energy and water resources in the UAE and worldwide are slowly depleting as demand increases, and it is up to us to work hard to conserve what we have.

The UAE has planned strategies to conserve our resources over the years, increase the efficiency of water and electricity consumption and develop and promote the use of renewable energy sources such as solar power.

It is in every individual's hand to be responsible and do their part in helping us conserve our water and energy, so that generations after us can have what we have.

Whether you are a doctor, engineer, labourer, waiter, salesman or student, let us work hand in hand in creating a better tomorrow for everyone. Remember that every person counts. Every drop counts. Every light switch counts. Every action no matter how small counts.





#### **IMPORTANT TIPS TO FOLLOW**

#### **AIR CONDITIONING**

Air conditioning during summer consumes a large amount of energy, so it would be advisable to put it off when you are going out of the house. If you are at home, avoid leaving the air conditioning units switched on in rooms that are not being used. Always be alert for any unusual performance or odd smells, smoke etc., emanating from the air conditioning units or vents and other devices around the house. If you notice anything out of the ordinary, switch the device off immediately and call DEWA on 991 for assistance.

### LIGHTS

#### ROOMS

- Use task lighting; put your light where you need it most instead of brightening the whole room.
- Use efficient lights (LED) for indoor & outdoor lighting because of their longer lifespan and higher efficiency compared to equivalent conventional lights.
- Clean your light bulbs regularly. Dirty and greasy light bulbs can reduce the light output by around 10%.
- Install dimmers in areas like the dining room or the bedroom.
- Use table lamps rather than turning on the lights for the whole room.
- When buying ceiling lights or chandeliers, try to choose ones that do not have too many bulbs/ lamps.
- Ensure all your house windows and doors are properly closed when air conditioning is switched on; this will ensure optimal operation of the AC units without loss of cooling.
- Clean air conditioner filters at regular intervals.
- Ensure air conditioners, even if they are a central system, have individual switches/ controls in each room.
- Set your thermostats to 24°C in the summer, and make sure you put it on automatic mode, so that it shuts and restarts at intervals.

- Caulk and weatherstrip doors and windows that leak air.
- Re-use fish tank water on household plants-it also acts as a good fertiliser.
- Keep blinds and curtains closed to reflect heat away from the house. During late afternoons or early evenings, open your blinds or curtains to let light in so to minimise the need for switching on indoor lights for young children who don't like sleeping in the dark, use a night light in the room.
- Watch TV together as a family instead of separately; it will save you energy and promote a healthy family relationship.
- Make sure you unplug your mobile phone / laptop charger when it is not in use.
- Unplug personal computers, electronic devices and chargers when they aren't in use; most electronics use electricity even when switched off.
- When buying a TV, Consider buying a high ESMA star rated model (4 or 5 stars).
- Consider using garden lights or spotlights that run on solar energy.



#### BATHROOMS

Avoid long showers. Shortening your shower by a minute or two can save you up to 150 gallons a month.

- You can save more than 100 gallons a week if you keep the tap closed while you shave.
- Replace tap filters and showerheads around the house with water flow reducers. Water flow reducers on taps save more than 30% of water.
- When adjusting water temperatures, turn the water flow down instead of increasing it to balance the temperature.
- Close your water heaters in the summer. The water gets naturally heated at that time of year.
- Don't throw waste down your toilet. It leads to unnecessary flushing and increases the risk of your toilet getting blocked.
- Upgrade your toilet to newer improved models with a dual flush system. It will save you water and money long term.

- If your toilet flush handle regularly sticks in the flush position letting the water run constantly, consider fixing or replacing it.
- By turning off the tap when you brush your teeth, you can save approximately 3 gallons of water! Filling a cup to rinse your mouth saves about 4 gallons.
- When you wait for the water to heat up after turning on the tap, save it in a bucket or empty bottle and use it to water your house plants.
- Invest in a good quality exhaust fan and do not leave it on for long hours.
- Insulate your water-heater and water pipes. You will get hot water faster and minimise wastage from waiting for it to heat up.

### **KITCHENS**

When washing dishes by hand, use the least amount of washing liquid possible. This reduces the water needed for rinsing. If you have an automatic dishwasher, operate it only when it is fully loaded. If your dishwasher is new, cut back on rinsing your dishes before you put them in the washer. Newer models clean more thoroughly.

- Don't let the tap run when you are cleaning your fruits or vegetables. Fill a pan or half the sink with water and use it for rinsing. After you're done, don't throw the water down the drain; use it to water your plants.
- Reduce the number of times the refrigerator or freezer door is opened to reduce cooling loss and conserve energy.
- While cooking or boiling water, cover your cooking pan with a lid, this makes water boil at a faster rate and your food gets cooked in a shorter time.
- Use flat-bottom pans for best contact with the heat, with tight-fitting lids to keep the steam in the container.

- Avoid opening the oven door repeatedly to check on your food. Use a clock or timer instead.
- For small meals, use toaster ovens, small electric pans or the microwave rather than large ovens. You will save a third to half as much energy.
- Use high-pressure cookers as they use less energy than normal cookers.
- Self-cleaning ovens are more energyefficient than normal ovens.



- Make sure you clean your fridge and freezer often and defrost it. Frost
- build-up increases the amount of energy to keep the motor running.
- When buying a fridge or freezer, buy one that is efficient and has a high ESMA Star rating (4 or 5 stars).
- Don't keep your refrigerator or freezer too cold. It is recommended to keep the fresh food compartment of your fridge 4°C and the freezer-10°C.
- Regularly check the rubber strip around the door of the refrigerator.
- Clean the cooling coils behind the refrigerator every six months at least.

- If you accidentally drop ice cubes when taking some from the freezer, don't throw them in the sink. Drop them in a house plant instead.
- Invest in a good quality exhaust fan.
- Try to use appliances that are small in size rather than large appliances.
- Appliances consume energy even while switched off. Make sure you unplug your mixers, grinders, juicers, blenders, pressure cookers etc., from the power supply after your use.
- Don't use running water to thaw frozen meat and food. Defrost it overnight in the refrigerator, or if you have a microwave, use the defrost setting.



# LAUNDRY

- When doing your laundry, try and operate the washing machine only when you are doing full loads. Set the water level to the appropriate size of load you are using.
- When buying a washing machine, try to go for high-efficiency models having 4 or 5 ESMA star rating.
- Wash your clothes in warm rather than hot water; this will decrease your consumption by 50%.
- Wash dark clothes in cold water. It will help clothes keep their colour and also saves on water and energy.
- Don't dry your clothes in the dryer more than necessary. You will save 15% in energy consumption. When possible, use a clothesline instead and let your clothes dry naturally in the sun.

- Dry heavy and light fabrics separately since it will minimise drying time.
- Always check and clean the lint filter in your dryer before each load.
- When buying a dryer, look for one with a moisture sensor that automatically shuts off the machine when your clothes are dry.
- Squeeze your washed clothes out of excess water before loading them in the dryer or hanging them on the clothesline.
- Consider buying an iron that has an auto switch-off in case you forget to turn it off. It is easier to iron creases on clothes using a steam iron or spraying water on your clothes while ironing.
- Powder or liquid detergents are generally better than laundry soap bars because they are better performers in various types of water. Some are also combined with bleach or fabric softeners, so they perform more than one task and save time and energy.





Water your garden in the morning or evening when temperatures are lower and help reduce evaporation. Recommended watering time is before 8 am or after 6 pm.

- To help plants retain moisture, spread a layer of organic mulch around them. This will save water, time and money.
- Your garden does not need to be watered daily. Check the soil moisture 2 to 3 inches below the surface, if the top 2 or 3 inches of soil are dry, then it requires watering.
- Use drip irrigation system for shrubs and trees so that water goes straight to the roots, preventing run-off.
- Regularly check your sprinkler system valves for leaks.
- Re-set the flow of your automatic sprinkler systems over the various seasons to suit the needs of plants and your lawn.

- Put an automatic shut-off valve on the sprinkler system so that it shuts off when it rains.
- Water your plants at short intervals to help it soak up the moisture.
- Avoid growing plants in areas where it will be difficult to water them. Consider planting in spring, autumn or winter when the requirement for watering is less.
- Place moisture readers in your garden to determine which plants or areas need to be watered.
- When watering your garden, use a kitchen timer to remind you when to stop.

- Ask your local nursery about plant selection and placement; certain plants require less water than others.
- Group plants that require similar amounts of water together so that some plants are not overwatered or others under-watered.
- Don't cut off lower branches on trees and shrubs. Allow leaf litter to accumulate on the soil. This minimises evaporation and keeps the soil cooler.
- Aerate the soil in your garden at least once a year so to help it retain moisture.
- When mowing your lawn, don't cut the grass shorter than 2.5 cm, so that it

is protected from the blazing sun and reduces evaporation.

- Water roots, not leaves.
- Position sprinklers so that your lawn gets all the water, not your sidewalk, driveway or paved areas.
- Compost your yard trimmings. It helps to retain moisture in the soil, so you will not need to water as much.
- Remove weeds or dead plants from your garden; they unnecessarily take up water.
- You can use recycled sewage water for your lawn and plants. Call the Municipality to obtain water for this use.

#### **LEAKS**

- Monitor your water bill and meter. Unusually high bills may mean you have leaks that need to be checked. Call DEWA Customer Care Centre on 04-6019999 for help.
- Leaky faucets that drip at the rate of one drop per second can waste up to 2,700 gallons of water per year. Plug them immediately

#### HOW TO CHECK IF YOU HAVE A LEAK:

If you're unsure whether you have a leak, read your water meter before and then again after 2 hours when no water is being used. If the meter does not give exactly the same reading, you probably have a leak.

A leaky toilet can waste about 200 gallons of water every day. If you're unsure your toilet has a leak, place a drop of food colouring in the tank; if the colour shows in the bowl without flushing, you have a leak.





### OUTDOORS

- If you have a pool, use a pool cover. This will help cut down on evaporation, and will leave your pool cleaner and minimise the need for chemicals.
- If you use an inflatable pool, make sure you re-use the water later on plants around your house.
- If you have a fountain at home, make sure it is equipped with recirculating pumps so that water is recycled.
- Use a bucket of soapy water to wash your car or place a shut-off nozzle on the end of your hose. It's a good idea to wash your car on the lawn; your grass will get watered as well.

- Wash your pets outdoors on the lawn so that the grass gets watered as well.
- Use a broom to clean your driveway or sidewalk of sand or dry leaves, instead of washing it off with a hose.
- Make sure you clean water tanks in the house regularly so that they stay clean and hygienic.
- Choose a fuel-efficient car. It takes 44 gallons of water to refine one gallon of crude oil.





### CONSERVATION TIPS WHEN BUILDING A NEW HOME

When planning on building a new house, consider taking steps to make it as green and energy-and water-efficient as possible.

- Talk to Dubai Municipality as well as your contractor about measures to make your home energy-efficient and choose green building materials and design. Ask about the different types of walls, pipe systems, wiring, insulation, heating and cooling systems, windows, lighting and interior materials that will help in energy efficiency. It might cost a little more, but it will pay off in energy savings and conservation.
- If you are building a new home or are replacing your windows, consider installing windows with double-glazing and spectrally selective coatings that reduce heat gain and help maintain the house's temperature. Select windows with air leakage ratings of 0.3 cubic feet per minute or less.

- Don't have large windows all around the house they will let in a lot of heat.
- If you are considering having a central air conditioning system, make sure you have a separate operation switch in each room.
- Get appliances (such as refrigerators, washing machines, dishwasher's etc.) that are efficient and have a high ESMA star rating (4 or 5 stars).
- Invest in good-quality exhaust fans.
- Make sure taps and showerheads are fitted with flow reducers or invest in taps or showerheads that have restricted flow.
- When planning out your garden, make sure it is landscaped, keeping in mind water and energy consumption.

## SOME WATER-AND ENERGY-SAVING **DEVICES AND APPLIANCES**

- Water flow reducers for taps and showerheads.
- Point-of-Use water heaters installed beneath kitchen or bathroom sink to give instant hot water.
- Drip irrigation system for trees and shrubs in the garden.
- Light dimmers.

- ESMA Star rated high-efficiency home appliances.
- ESMA High star rated TVs.
- Window and doorframe foam/rubber seals, to stop air escaping or coming in Lighting sensors or timers.
- Solar-powered garden or walkway lights.
- LED Lights.



•



#### CONSERVATION TIPS AT THE OFFICE

- To save electricity, put your computers, printers, copiers and fax machines on 'standby' or 'sleep' mode after about half an hour of inactivity. The shorter the period, the more energy you save.
- When everyone has left for the day, switch off lights and unused computers.
- Don't keep unnecessary or extra equipment; share as much as you can between each other to reduce energy consumption.
- Only print or photocopy whenever there is a need for it and always
- recycle discarded or unused paper.
- Recommend the installation of taps in the washrooms that operate through sensors.
- If your building has a rotating door, use that instead of a standard swinging door. Rotating doors allow less cold air to escape.

- Instead of taking the elevator, take the stairs. You'll save energy and get some exercise as well. If you are a group, go in the elevator together instead of waiting to take a separate one.
- If you have half-used bottles of water lying around the office, consider using it to either water any office plants or to make your morning tea or coffee. The boiled water gets rid of bacteria and is healthy to drink.
- When it's the weekend, make sure that all equipment and lights are switched off and unplugged, and that nothing is running unnecessarily. Equipment could include computers, copiers, projectors, coffee makers, kettles in the pantry, etc. Also, make sure that all taps are tightly closed in the washrooms and not dripping. Imagine how much water would be wasted over the weekend!

## CONSERVATION TIPS WHEN YOU ARE AWAY ON HOLIDAY

- Make sure you switch off all air conditioning and lights in the house, and it is very important to check taps and pipes for any dripping or leaks before you go away. A leaky tap or faulty pipe can possibly cause flooding in the house if left unattended.
- Unplug all power outlets and switch off the main switch.
- Close the water supply to your appliances. Make sure the main water line valve is shut off.
- Turn your water heater off.

 Install sensor or light timers, so that boundary lights and other lights that need to be turned on in the house are switched on during the hours that are needed only.

#### **ACTIVATE AWAY MODE**

As part of Smart Living initiative, DEWA offers you Away Mode. This feature helps you to monitor your electricity and water consumption closely and advise in case of unusual consumption while you are away. Consumption details will be sent to your email on a daily or weekly basis. Log in to your DEWA account through the smart app or website and know more about "Smart Living" initiative.



### SOME ECO-FRIENDLY TIPS

#### WATER POLLUTION

- Many household chemicals are toxic, so try and choose less toxic or non-toxic alternatives if available.
- Do not throw unwanted household chemicals and cooking oil down the drain. It can disrupt your septic and drainage system.
- Use phosphate-free detergents.

#### **GREEN BUILDINGS\***

Be an advocate of developing Green Buildings and houses around the UAE!

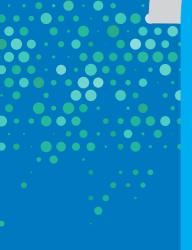
Green Buildings are based on environmentally responsible design and resource-efficient space that cut down on maintenance and operation costs. They inflict minimal impact on the environment by using minimum resources and boosting the comfort and productivity of their occupants.

Other benefits of such buildings include reduced air and water pollution, limited waste production, energy-efficiency and renewable power and reducing the destruction of natural areas.

The UAE is promoting the concept of Green Buildings and we hope that someday the majority of buildings and houses in this country will be eco-friendly.

\*Refer to Green Building regulations in Dubai







#### WORK TOGETHER WITH US

No matter who you are, be a role model and help promote conservation at your workplace.

- If you notice any water leakage, broken pipes or open hydrants when you are out, or any electrical wiring that is sticking out or not in place, be a helpful green citizen and report it to Dubai Electricity and Water Authority, so that swift action can be taken to repair the faults and save our water and energy.
- If you see civil personnel engaged in repair work around your house or in your area, please be considerate to them; they are working for you and for your benefit.

#### **BE THE EDUCATOR**

- Share conservation tips with family and friends and help spread awareness.
- Kids learn fast, so teach them how to implement energy and water-saving measures in their daily life. Praise and reward them when they follow your directions, it will encourage them to

repeat it. Discuss with them topics on the environment and the effects of conservation.

- Talk to domestic staff about water- and energy-saving techniques. They may not be aware of conservation methods.
- Distribute leaflets or put-up posters in your mosque wudu (ablution) area to educate worshippers about water conservation and how their acts and behaviour can help them get closer to God.
- Be effective. Participate in events and important dates such as World Environment Day or Earth Day. Visit the conservation stand at WETEX (Water Electricity Technology & Environment Exhibition).
- If you have any new suggestions to help conserve our water and electricity, please share it with us. We would love to hear from you.



## HAPPINESS BEGINS WITH SMART LIVING AND SMART CHOICES

- DEWA's Smart Living initiative helps you monitor your consumption easily and make smart decisions to reduce consumption and live a happier life.
- Log into your account on DEWA's smart app or website and make use of the many features we provide for you.

#### Your happiness is our priority #We\_Are\_All\_Responsible



JNDERSTAND YOUR BILL



COMPARE YOUR CONSUMPTION WITH SIMILAR HOMES



SET YOUR CONSUMPTION ALERTS\*



GET EXCLUSIVE OFFERS

- \*For those already having smart meters.
- DEWA plans to complete the installation of smart meters around Dubai by end of 2020.



