



# **Green Energy Infinite Energy**

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# **TOWARDS** A BETTER FUTURE

While we are focused towards better and more satisfactory services inspired by your rich experience of enabling these services in you day to day life, we pledge to provide a product with future capabilities and technology that will lead your life to a better future.

Ashirwad will always be there at every stage of your life with the extraordi nary green and renewable energy products and services.

# **OUR MISSION**

 Effectively Engage Youth Power Of India To Achieve vision Of Green & Infinite Energy Of Ashirwad Solar.

# **OUR VISION**

• To Provide Renewable Infinite Energy To Every Home Of Every Village in India.

# **OUR STORY**

Back in 2007, Ashirwad started as a Fabricator to supply Solar water heater parts. Soon in 2010, we became Ashirwad Solar with a small factory unit producing Solar water heaters. Our quest for continuous development and endeavour to generate a better future we are now expanded to more than 15 products in Solar and green energy generation.

While we were busy in continuous research and development for best quality products in the sector our beloved partners and dealer network has served 1000 of clients. They are true partners in the success of Ashirwad. World-class products and Best in class service have satisfactory feedback from customers.

We are now dealing internationally by importing ETC tubes from European countries and south-east Asia. We are proud to supply these tubes all over India. Our research has always supported our dream of a better future by enabling us to provide more artistic yet optimum performance products over the years.

We are committed to our quest of generating a better future and our channel partners, our dealers and imploringly our customers are all part of this commitment. We are thankful for their belief and support over the period.

# Founders



# Lt. Mr. Anil Mulay

(Founder) Bachelor in Commerce

An entrepreneur of the golden era. He started the distribution of engineering products in 1992. A strong network building knowledge and royalty to customer made him achieve best distributor award for consecutive three years for SKF. After several years of a distributorship, he started "Ashirwad Engineers" to manufacture and supply solar energy products and parts. With the vision to provide quality products and service and help of Mr Ashish, he started Manufacturing Solar water heater. He worked hard and started this empire from zero, so now we are considered an expert in the industry. Today we are proud to expand his dream to more than 15 solar energy products.



Mr. Ashish Mulay (Managing Director) Bachelor in Mechanical Engg.

# **FOUNDER'S MESSAGE**



### Welcome to the Ashirwd family !!!

We are happy to have you here. Since 2007 Ashirwad has adopted every technological change and we will lead this change in the coming future for sure. All our successful products and technological advances are just because of you all, our channel partners our customers and well-wishers. We assure you that your love and support to Ashirwad will never ever disappoint you. We will lead this sector and make India a super country in the form of renewable energy utilization.

Once again welcome to Ashirwad Family.





Mr. Abhijeet Kabule (Director, Sales and Operations)



Mr. Manoranjan Jadhav (Director Projects)



Mr. Rajendra kulkarni (General Manager)



Solar power in India is a fast developing industry. The country's solar installed capacity reached 35.12 GW as of 30 June 2020. India has the lowest capital cost per MW globally of installing solar power plants.

The Indian government had an initial target of 20 GW capacity for 2022, which was achieved four years ahead of schedule. In 2015 the target was raised to 100 GW of solar capacity (including 40 GW from rooftop solar) by 2022, targeting an investment of US\$100 billion. India has established nearly 42 solar parks to make land available to the promoters of solar plants. In the decade ending 31 March 2020, India expanded its installed solar power capacity by 233 times from 161 MW to 37,627 MW.

Rooftop solar power accounts for 2.1 GW, of which 70% is industrial or commercial. In addition to its large-scale grid-connected solar photovoltaic (PV) initiative, India is developing off-grid solar power for local energy needs. Solar products have increasingly helped to meet rural needs; by the end of 2015, just under one million solar I anterns were sold in the country, reducing the need for kerosene. That year, 118,700 solar home lighting systems were installed and 46,655 solar street lighting installations were provided under a national program; just over 1.4 million solar cookers were distributed in India.

The International Solar Alliance (ISA), proposed by India as a founder member, is headquartered in India. India has also put forward the concept of **"One Sun, One World, one Grid" and "World Solar Bank"** to harness abundant solar power on a global scale.



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# Water Heater

Solar water heating (SWH) is the conversion of sunlight into heat for water heating using a solar thermal collector. A variety of configurations is available at varying cost to provide solutions in different climates and latitudes. SWHs are widely used for residential and some industrial applications.

# GI/MS Tank Water Heater -

Ashirwad's Double insulated solar water heaters are best in class Made in India water heaters. Enjoy free and unlimited hot water with a range starting from 100 LPD to 1000 LPD systems. Maintenance - free, durable and longlasting systems have been a specialty of Ashirwad over the years.



## SS tank water heater

Whatever may be the type of water Ashirwad's SS tank solar water heater will provide hassle-free and maintenance less hot water. Hard water can be easily used with Ashirwad's SS solar water heater. These tanks are rust proof and durable.

- Daily hot water up to 80° C and better performance in winter and cloudy days.
- No Scale formation and No pipe blockage will occur by using salt and hard water.
- Compressed PUF insulated storage tank to retain the Hot water for more than 48hrs.
- Inner Tank made of High-grade stainless steel used in a marine application.
- Non welded technology used for making inner tank to completely avoid inner tank leakages.
- Suitable for borewell water and hard water usage.

### **Technical Specifications:**



| Capacity                | 100               | 150           | 200          | 300          | 500           | 1000        |
|-------------------------|-------------------|---------------|--------------|--------------|---------------|-------------|
| Suitable for            | 1-3 persons       | 3-4 persons   | 5-7 persons  | 8-10 persons | 18-20 persons | 35+ persons |
| Hot water connections   | 1 point           | 1 point       | 1 to 2 point | 2 to 3 point | 3 to 5 point  |             |
| Expected annual Savings | 11000             | 17000         | 22000        | 30000        | 50000         |             |
| Area Required           | 1.1m x 1.8 m      | 1.5 m x 1.8 m | 2.0m x 1.8m  | 2.8m x 1.8m  | 3.7m x 1.8m   |             |
| No. Of Tubes            | 10                | 15            | 20           | 30           | 32            | 100         |
| Tube Size               | 58x1800mm         | 58x1800mm     | 58x1800mm    | 58x1800mm    | 58x2100mm     | 58x1800mm   |
| Circulation             | Thermosyphon      |               |              |              |               |             |
| Hot Water Temp          | 60 degree celcius |               |              |              |               |             |
| Overnight Temp Drop     | 5 degree celcius  |               |              |              |               |             |
| Inner Tank              | MS/SS304/GI       |               |              |              |               |             |
| Coating                 | GI Pre Coated     |               |              |              |               |             |
| Tank Insulation         | PUF               |               |              |              |               |             |

# 2 ETC TUBE

An evacuated-tube collector contains several rows of glass tubes connected to a header pipe. Each tube has the air removed from it (evacuated) to eliminate heat loss through convection and conduction.

Inside the glass tube, a flat or curved aluminium or copper fin is attached to a metal pipe. The fin is covered with a selective coating that transfers heat to the fluid that is circulating through the pipe.

There are two main types of evacuated tube collectors :

Direct-flow evacuated-tube collectors

| Sr.No. | Available Sizes |  |
|--------|-----------------|--|
| 1.     | 47x 1500        |  |
| 2.     | 47x 1800        |  |
| 3.     | 58x 1800        |  |
| 4.     | 58x 2100        |  |



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# SOLAR PANEL

The term solar panel is used colloquially for a photovoltaic (PV) module.

A PV module is an assembly of photovoltaic cells mounted in a framework for installation. Photo-voltaic cells use sunlight as a source of energy and generate direct current electricity.

A collection of PV modules is called a PV Panel, and a system of Panels is an Array. Arrays of a photovoltaic system supply solar electricity to electrical equipment.

Both monocrystalline and polycrystalline solar panels serve the same function in the overall solar PV system: they capture energy from the sun and turn it into electricity. They are also both made from silicon, which is used for solar panels because it is an abundant, very durable element. Many solar panel manufacturers produce both monocrystalline and polycrystalline panels.

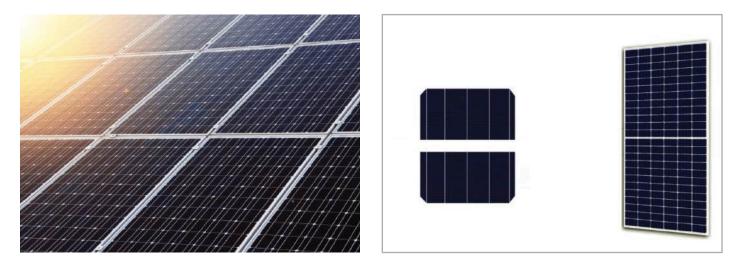
Both monocrystalline and polycrystalline solar panels can be good choices for your home, but there are key differences between the two types of technology that you should understand before making your final solar purchase decision. The main difference between the two technologies is the type of silicon solar cell they use: monocrystalline solar panels have solar cells made from a single crystal of silicon, while polycrystalline solar panels have solar cells made from many silicon fragments melted together.



# MonoPERC solar panel -

PERC solar cells are a relatively new innovation in the solar industry. PERC can stand for either Passivated Emitter and Rear Cell or Passivated Emitter and Rear Contact. At its core, a PERC solar cell is simply a more efficient solar cell, meaning that solar panels built with PERC cells can convert sunlight into usable electricity more easily.

Solar panels made from PERC solar cells typically perform better than traditional panels in both low-light conditions and high temperatures. PERC technology boosts efficiency through the addition of a layer to the back of a traditional solar cell, which provides several benefits to the cell's production.



## Twin peak -

Twin Peak Series solar panels feature an innovative design with high panel efficiency and power output, enabling customers to get the most out of the space used for the installation.

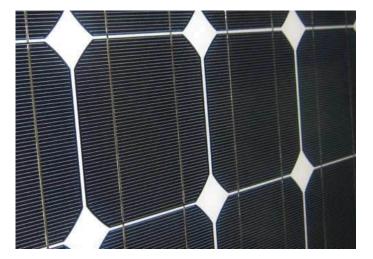
This has been achieved through reducing resistance at both cell and panel levels, exposure of more cell area to sunlight and increasing the amount of light absorbed.





### Monocrystalline solar panels -

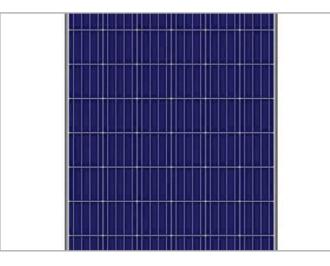
Monocrystalline solar panels are generally thought of as a premium solar product. The main advantages of monocrystalline panels are higher efficiencies and sleeker aesthetics. To make solar cells for monocrystalline solar panels, silicon is formed into bars and cut into wafers. These types of panels are called "monocrystalline" to indicate that the silicon used is single-crystal silicon.





# Polycrystalline solar panels

Polycrystalline solar panels are also made from silicon. However, instead of using a single crystal of silicon, manufacturers melt many fragments of silicon together to form the wafers for the panel. Polycrystalline solar panels are also referred to as "multi-crystalline," or many-crystal silicon. Because there are many crystals in each cell, there is less freedom for the electrons to move. As a result, polycrystalline solar panels have lower efficiency ratings than monocrystalline panels.





# **Available Capacities**

3 watt to 395-watt panels available in the customized capacity as per the need of the customer.

### 4

# **SOLAR POWER -**

Solar power is the conversion of solar radiation into electricity through the use of solar photovoltaic cells. This conversion takes place in the solar cell by the photovoltaic effect.

As said by many experts, the amount of solar energy reaching the earth is more than 10000 times the current energy consumption by man.

#### **Different Types of Solar Electric Systems**

There are different configurations of the solar electric system and are discussed below.

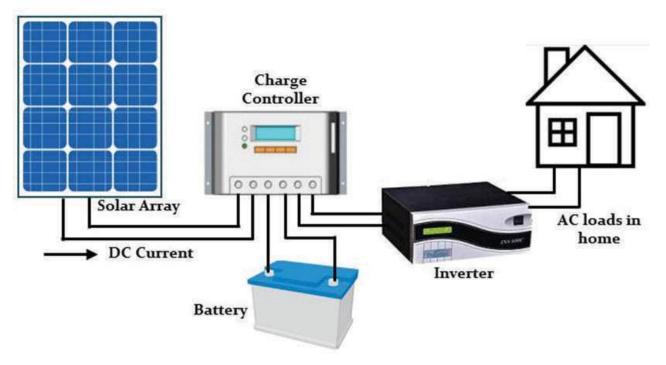
# **Off-grid/Standalone Solar Electric Systems**

These are the most popular type of solar installations which are primarily designed to supplement or replace the conventional mains supply.

These are mainly used in the locations where there is no other source to provide power supply and hence these are used in remote locations and rural areas where it is difficult to get the power from grid extensions.

Generally, off-grid systems use solar power to charge the batteries, and this charge is then supplied to the load when needed. The battery power either directly operates the DC loads (DC lamps) or drives the power inverter that converts the DC power to AC power to operate the appliance like pumps, lighting equipment, refrigerators, etc.

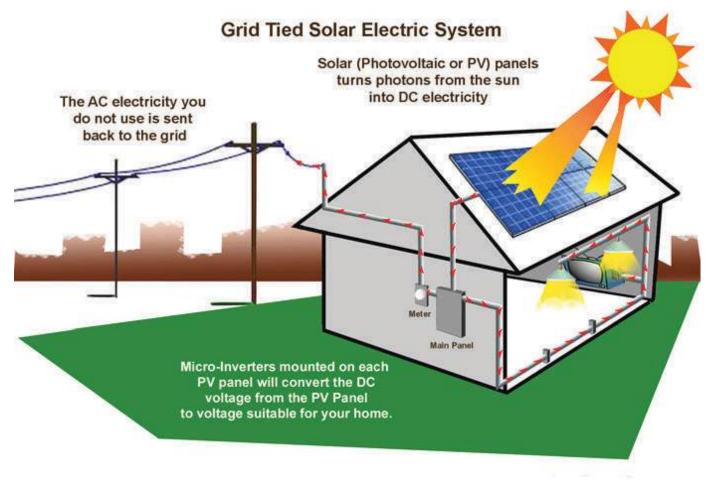
This method is followed for any standalone system whether it is a pocket calculator or a complete off-grid home. Standalone systems are comparatively small and simple systems.



# **Grid-connected Solar Electric Systems**

These systems effectively create a micropower station and are connected directly into the electricity grid. These are normally found in urban areas where power is readily available.

During the day it feeds the excess electricity generated into the grid and during evening and night it imports the electricity from the grid. Here the grid acts like a storage medium in which power is taken from the grid when needed.



# **Grid-connected Solar Electric Systems**

It is to be noted that, grid-connected system doesn't have to supply enough electricity to cover the entire power demand. So this system can be small or large depending on the owner's choice.

This system receives the payment for each kilowatt of power which is supplied to the electricity providers. This type of installation reduces the dependence on electric utilities and hence reduces the electricity bills.

# PUMP -

There are several different types of solar-powered pumps depending on how they have been classified. But primarily there are four types of solar water pumps--submersible pumps and surface pumps, direct current (DC) pumps and alternate current (AC) pumps.

### Submersible pumps :

As the name suggests, a submersible pump is located deep below the ground level and remains submerged underwater.

## Surface pumps :

The surface pumps remain out of the water and in the open. They are installed where the water table is within a depth of 10 metres.

## DC pump :

This pump runs on a motor which operates on direct current, therefore no battery or inverter is needed in this type of pump.

# AC pump :

The motor of this pump operates on alternating current, which means the direct current produced by the solar panels gets converted to AC using the inverter. The conversion from DC to AC leads to loss of power from generation and consumption.Available from 1 hp.





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# STREET LIGHT -

Solar street lights are raised light sources which are powered by solar panels generally mounted on the lighting structure or integrated into the pole itself. The solar panels charge a rechargeable battery, which powers a fluorescent or LED lamp during the night.



#### Semi integrated -

Semiintegrated lamp tries to overcome complicated installation and expensive price of the normal solar street lamp. Semi-integrated solar street lamps only integrate solar cell, controller, and battery, while the lamp is separated using a cable.

This configuration makes semi-integrated lamps cheaper and easier for installation that is suitable for rural areas.

#### All in one -

All In One Solar street light is a new age and compact lighting solution integrating Solar panels, LED light, Lithium-ion or Lithium Ferro Phosphate LiFePO4 battery and a PIR motion sensor.





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# SOLAR TREE -

A solar tree is a structure incorporating solarenergy technology on a single pillar, like a treetrunk. It may be a solar artwork or a functional power generator





### 8

# LANTERN -

A solar lamp, also known as solar light or solar lantern, is a lighting system composed of a LED lamp, solar panels, battery, charge controller and there may also be an inverter. The lamp operates on electricity from batteries, charged through the use of the solar photovoltaic panel.

Solar-powered household lighting can replace other light sources like candles or kerosene lamps. Solar lamps have a lower operating cost than kerosene lamps because renewable energy from the sun is free, unlike fuel. In addition, solar lamps produce no indoor air pollution, unlike kerosene lamps. However, solar lamps generally have a higher initial cost and are weather dependent.





# SOLAR COOKER -

A solar cooker is a device which uses the energy of direct sunlight to heat, cook or pasteurize drinks and other food materials. Many solar cookers currently in use are relatively inexpensive, low-tech devices, although some are as powerful or as expensive as traditional stoves and advanced, large-scale solar cookers can cook for hundreds of people.

Because they use no fuel and cost nothing to operate, many nonprofit organizations are promoting their use worldwide in order to help reduce fuel costs (especially where monetary reciprocity is low) and air pollution and to slow down the deforestation and desertification caused by gathering firewood for cooking.



#### ---: OUR PROMINENT CLIENTS:----

#### **OUR INSTALLED SOLAR PV PROJECTS.**

| Sr. No. | Name of Project  | SOLAR PV CAPACITY |
|---------|--|-------------------|
| 1       | YORK TRANSPORT EQUIPMENTS PVT LTD.                       | 700 KW            |
| 2       | VJ YASHWIN ORIZONNTE KHARADI                             | 60 KW             |
| 3       | THE ABIANCE EXCELLANCY HOTEL, WAKAD                      | 75 KW             |
| 4       | RENUKA PACKAGING, SANGAMNER                              | 35 KW             |
| 5       | AMBIANCE HOTEL, MODEL COLONY                             | 40 KW             |
| 6       | VJ YASHONE HINJEWADI, MAAN                               | 40 KW             |
| 7       | EPC COLLECTOR OFFICE                                     | 185 KW            |
| 8       | SHOBHA INDUSTRY, GOKULNAGAR.                             | 120 KW            |
| 9       | EPC GOVERNMENT COLLEGE OF ENGINEERING,<br>AURANGABAD     | 150 KW            |
| 10      | ON-GRID SYSTEM NASHIK I & C FOR KALPA<br>POWER PVT. LTD. | 150KW             |
| 11      | EPC at PAWAR PUBLIC SCHOOL, HINJEWADI                    | 100KW             |
| 12      | VISHAL PARTMENT, NARHE                                   | 10 KW             |
| 13      | SHWAS HOSPITAL, AMBEGAON                                 | 15 KW             |
| 14      | RESIDENTIAL SITES  | 70 KW             |
| 15      | POULTRY AT KHED SHIVAPUR                                 | 15 KW             |
|         |  |                   |

#### **OUR ONGOING PV PROJECTS**

| Sr. No. | Name of Project                                  | SOLAR PV CAPACITY |
|---------|--|-------------------|
| 1       | TEERTH EXCHANGE, BALEWADI                        | 108 KW            |
| 2       | GOEL GANGA GROUP, GDT PUNE.                      | 30KW              |
| 3       | AMARAI 69 HOTEL , BHIVRI                         | 85KW              |
| 4       | AMARAI 69 HOTEL, KHED SHIVAPUR                   | 60 KW             |
| 5       | SAIKRUSHNA FOOD & AGRO INDUSTRY ,<br>SANGAMNER   | 15KW              |
| 6       | RESIDENTAIL NIKAM SAHEB, KATRAJ                  | 10 KW             |
| 7       | INDIAN OIL PETROL PUMP, MAULI PETROLEUM , SINNAR | 15KW              |
| 8       | RESIDENTIAL BUNGLOW, RAHATA                      | 10KW              |
| 9       | YUVA POLYPRINT , SANGAMNER                       | 90 KW             |

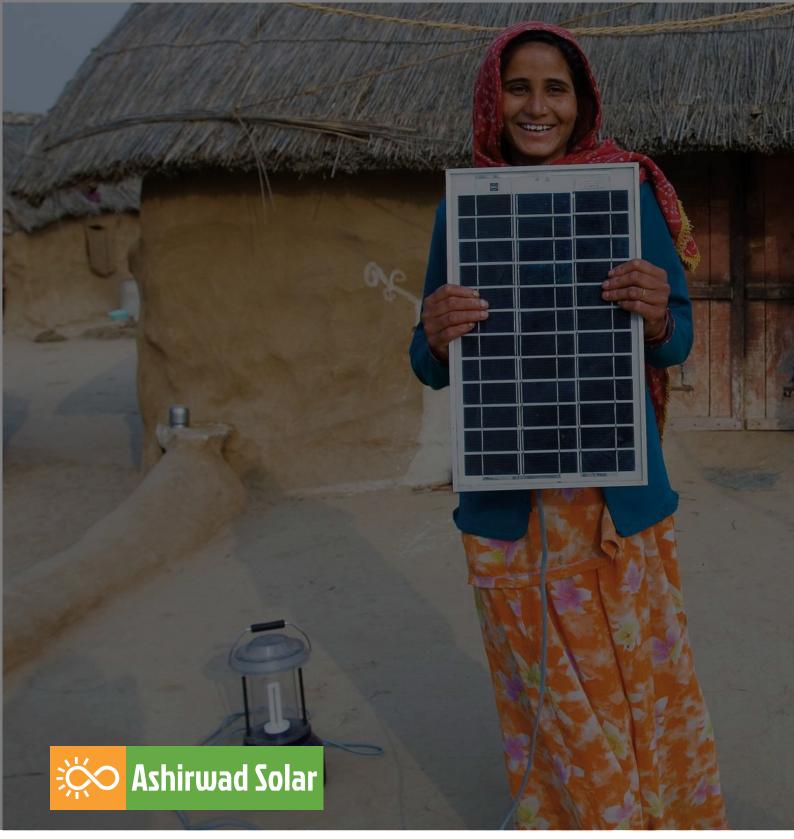
| Sr. No. | Name of Project                              | SWH Litre capacity installed |
|---------|--|------------------------------|
| 1       | YASHWIN ENCORE WAKAD/VILAS JAVDEKAR<br>GROUP | 58000 LITRE                  |
| 2       | YASHONE MAAN/ VJ GROUP                       | 127000 LITRE                 |
| 3       | TEERH AVILA TOWERS                           | 28000 LITRE                  |
| 4       | SUKHNIWAS VJ MAAN                            | 32000 LITRE                  |
| 5       | MANTRA MONTANA                               | 22000 LITRE                  |
| 6       | BALAJI VISHWA                                | 25000 LITRE                  |
| 7       | I TRENDS SAHEEL GROUP                        | 12500 LITRE                  |
| 8       | PRIDE WORLD CITY                             | 110000 LITRE                 |
| 9       | ARV NEWTOWN PISOLI                           | 36000 LITRE                  |
| 10      | GBK BUILDER KALYAN                           | 18000 LITRE                  |
| 11      | VARDHAMAN BUILDER/ VARDHAMAN DREAMS          | 36000 LITRE                  |
| 12      | VARDHAMAN BHOOMI                             | 10000 LITRE                  |
| 13      | VARDHAMAN RESIDENCY                          | 9000 LITRE                   |
| 14      | BHONDWE ESTATE                               | 20000 LITRE                  |
| 15      | INDRADHANU /VISION GROUP                     | 180000 LITRE                 |
| 16      | PATEL GROUP/MOSHI                            | 20000 LITRE                  |
| 17      | NEW SAI TOWER                                | 22000 LITRE                  |
| 18      | PLATINUM TOWER , WAKAD                       | 15000 LITRE                  |
| 19      | RAGHUNANDAN KASTURI , PISOLI                 | 9700 LITRE                   |

#### **OUR SOLAR WATER HEATER PROJECTS**

### Maintenance / Service to Providing to

### clients

| Sr. No. | Name of Project                        | SWH Litre capacity installed |
|---------|--|------------------------------|
| 1       | LAKE VISTA, KATRAJ                     | 78000 LITRE                  |
| 2       | ASTONIA ROYALE, AMBEGAON               | 72000 LITRE                  |
| 3       | VITTHAL HERITAGE, KATRAJ               | 60000 LITRE                  |
| 4       | LAKE WOOD, DATTANAGAR                  | 8000 LITRE                   |
| 5       | VENKATESH SHARVIL, DHAYRI              | 27600 LITRE                  |
| 6       | YASHWIN ENCORE                         | 58000 LITRE                  |
| 7       | PRISTINE PACIFIC PH-I, PH-II, AMBEGAON | 64000 LITRE                  |
| 8       | SILVER NEST , NARHE                    | 19000 LITRE                  |
| 9       | PREMIA CO-OP HSG SOC.                  | 48000 LITRE                  |
| 10      | LAXMI DEEP CO-OP HSG SOC               | 40000 LITRE                  |
| 11      | WINDSOR COUNTY AMBEGAON                | 60000 LITRE                  |
| 12      | MIT –WPU SWH HOSTELS                   | 40000 LITRE                  |
| 13      | SAI MYSTIQUE ,AMBEGAON                 | 25000 LITRE                  |
| 14      | VENKATESH LAKE ORCHID, AMBEGAON        | 8000 LITRE                   |



# **Contact Us**

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