Reduce your energy bills up to 70% by installing solar hot water system to your home. Solar Hot water systems are the most cost effective solution to installing solar home energy. Given the fact that these Solar Panels work all round in the UK climate conditions, as they produce energy from the Sun's natural UV Radiation. What the Panel does is heat a chemically bonded coating on glass, either through a flat glazed unit or evacuated or tube, that in turn heats a non toxic fluid. The fluid is pressurised and pumped around a small pipe that carries the fluid into a coil inside a cylinder tank. The system has to be pressurised because of the temperature generated inside the tubes of the Solar Panel collector. Modern solar panel systems are very efficient and require minimal maintenance.

How does solar panel works?

Solar energy is absorbed by solar collectors, usually mounted on the roof of a building. When exposed to sunlight the solar collector's heat up to temperatures significantly above the ambient air temperature, and once they are several degrees Celsius warmer than the water in your hot water cylinder, heat will be transferred to the cylinder

The panels themselves usually remain closed (indirect) system filled with an antifreeze mixture (heat transfer fluid) which is circulated around the system. This takes the heat absorbed by the collectors and offloads it into the hot water cylinder via a heat exchanger in the same way as a conventional boiler. No mixing between the water in the cylinder and the antifreeze mixture occurs.

Some installers provide equipment that does not necessarily require the replacement of your current, single coil hot water cylinder, although these are not as common. Direct drain back systems often allow this as the fluid flowing through the collector may be the same water that eventually flows from you hot water tap.

Other systems require a twin coil hot water cylinder (solar cylinder) to be installed, in which the heat exchange coil for the solar water heating system is sited below that of the conventional heating system in the hot water tank. This designates the solar thermal system as the primary water heating source, preventing the conventional boiler from firing unnecessarily.

Flat panels are the simpler of the two collector technologies, and consequently are of lower cost and efficiency. Essentially they consist of a rectangular flat sheet of metal coated with a special absorbent paint. In contact with the back of the metal sheet are a series of pipes through which the antifreeze mixture flows, removing heat from the panel and transporting it to the hot water cylinder. This is encased in an insulated unit and glazed to the front. The flat panels look very similar to Velux windows when installed on the roof.

Evacuated tube collectors are more advanced, containing discreet, parallel rows of evacuated tubes containing a heat pipe, with either a ?dry? or ?wet? connection. Heat trapped within the tubes is prevented from escaping by a partial vacuum and so are more efficient, particularly in colder weather. The heat is transferred from the collector to a manifold, through which the heat transfer fluid flows; taking the heat energy generated to the hot water cylinder.

Once the heat has been delivered to the hot water cylinder, the cooled heat transfer fluid then circulates back to the collector so that it can reheat and begin the process all over again.

East Central London, Hill, Heathrow Airport, South West London, South West London: SW1 covers the Westminster, Knightsbridge, Belgravia, Pimlico, Victoria area, SW2 Brixton (central and southern Brixton, includes Streatham Hill), SW3 Chelsea, Brompton, SW4 Clapham, SW5 Earl's Court, Clapham Common, Clapham South ,SW5 Cromwell Road ,SW5 Earl's Court , SW6 Fulham, Fulham SW6, Fulham SW6 Palace Road, SW6 Putney Bridge, SW6 Broadway, SW6 Sands End, Parsons Green, Parson's Green, SW7 South Kensington, Kensington Gore SW7, Queen's Gate, SW7 Gloucester Road, SW7 Cornwall Gardens, SW7 Kensington Gore, SW7 Queen's Gate, SW7 South Kensington, SW8 South Lambeth (also covers Vauxhall, SW8 Nine Elms), SW8 Wandsworth Road, SW8 South Lambeth, SW9 Stockwell (includes northern Brixton), SW9 Vauxhall SW9, Vauxhall SW8 Wandsworth Road, Clapham North, SW9 Coldharbour Lane, SW9 Stockwell, SW9 Vauxhall Bridge, SW10 World's End, SW10 West Brompton ,SW11 Battersea, SW11 Belgravia, SW11 Clapham Junction ,SW11 Lavender Hill, SW12 Balham, SW13 Barnes Bridge, Belgravia, West Brompton (NB Brompton is coverd by SW7, SW3 and SW1), SW11 Battersea, Clapham Junction, SW12 Balham, SW13 Barnes, Castelnau, SW13 Rocks Lane, SW14 East Sheen South West London commercial plumber SW14 Mortlake SW14 Mortlake (also covers East Sheen), SW15 Putney, SW15 East Putney, SW15 Putney Heath, SW15 Putney Vale (also covers Roehampton), SW16 Streatham, SW16 Norbury, Streatham Common, SW16 Streatham, Norbury, SW17 Tooting, SW17 Furzedown, SW17 Summerstown, SW17 Tooting, Tooting Bec, Tooting Broadway, SW17 Tooting Graveney, SW17 Upper Tooting, SW18 Wandsworth

(Town), Earlsfield, SW18 Earlsfield, SW18 Southfields, Wandsworth, South West London,

Wandsworth Common, SW18 Wandsworth Town, SW18 West Hill, SW19 Wimbledon (also covers Merton (Town) and Collier's Wood), SW19 Wimbledon Common, SW19 Somerset road, Wimbledon, SW19 Colliers Wood, SW19 Haydons Road, SW19 Queens Road SW20 South Wimbledon, Burst water pipes emergency plumber in SW20 Bushey Mead, SW20 Copse Hill, Cottenham Park SW20, Merton SW20 Gloucester, West Wimbledon, Raynes Park and Cottenham Park, Sout h East London : SE1 covers the Waterloo, Bermondsey, Southwark (South Bank & The Borough) &north Lambeth area, London Bridge, Tower Bridge, SE1 Borough, SE1 Bermondsey Westminster Bridge, London Eye plumbing and heating engineer SE1 Lambeth North, SE1 London Bridge, SE1 Westminster Bridge, SE1 Waterloo, South Bank, Southwark, SE1 Cathedral ,SE1 Old Kent Road , New Kent Road ,SE1 Riverside , Walworth SE1 St. John's Wood, SE2 Abbey Wood (includes Thamesmead South), ,SE2 Bostall Woods, SE2 West Heath ,SE3 Blackheath, Westcombe Park (also covers Kidbrooke), , SE3 Blackheath London , Blackheath, SE3 Westcombe Park, SE4 Brockley, Crofton Park, Honor Oak Park, SE4 Brockley, Crofton Park SE4 Honor Oak Park, SE5 Camberwell, SE5 Camberwell, SE5 Denmark Hill, SE5 Camberwell, Denmark Hill, SE6 Catford, SE6 Bellingham, Catford SE6 Hither Green gas boiler service and installer, Hither Green, Bellingham, SE7 Charlton, SE7 Charlton, SE8 Deptford, SE8 Deptford High Street, Deptford, SE9 Eltham, SE9 Avery Hill, Well Hall, Deptford, Eltham, Deptford, SE9 Mottingham, Deptford, SE9 New Eltham, Mottingham, SE10 Greenwich (Town), SE10 Greenwich, SE10 Ranger's House, SE11 Lambeth, SE11 Kennington, SE11 Lambert, SE11 Oval, Kennington, SE12 Lee, SE12 Lee Green, Lee, Lesnes Abbey, SE12 Grove Park, SE13 Hither Green, Lewisham (Town), SE13 Ladywell SE13 Lewisham SE14, SE14 New Cross, New Cross Gate, SE15 Peckham, SE15 Peckham Plumber, SE15 Rye Lane, Nunhead, SE16 Rotherhithe, South Bermonsey, SE16 Surrey Quays, South Bermondsey, SE16 Rotherhithe, Rotherhithe street, Surrey Docks, SE17 Walworth, SE17 Newington, SE17 Walworth, Elephant & Castle, SE18 Woolwich (also covers Plumstead), SE18 Woolwich, Walworth, SE18 Woolwich, SE18 Plumstead, Shooter's Hill, SE19 Crystal Palace, Norwood, SE19 Crystal Palace, SE19 Upper Norwood, SE19 Gipsy Hill, Central Norwood, Upper Norwood and Norwood SE20 Anerley, Penge), SE20 Anerley, SE20 Penge, SE21 Dulwich, SE21 Norwood, SE21 West Dulwich commercial gas engineer, SE21 Dulwich (includes West Dulwich), SE22 East Dulwich, SE22 East Dulwich , SE22 North Dulwich SE23 Forest Hill, SE23 Forest Hill, SE23 Honor Oak, Peckham Rye, SE23 Horniman Museum, SE23 Kidbrooke, Upper Sydenham, SE23 Norwood Junction, SE24 Herne Hill, SE25 South Norwood, Commercial catering gas engineer SE25 South Norwood, SE25 Elmers End, SE25 Norwood Junction, SE26 Sydenham, SE26 Sydenham, SE26 Sydenham Hill, Lower Sydenham, SE26, Upper Sydenham, SE27 West Norwood, Tulse Hill, SE27 West Norwood commercial gas plumbing repair SE27 Tulse Hill, SE28 Thamesmead are in SE2, and in DA18 Dartford, Brixton SW2 Commercial Solar Hot Water Installation SW11 Belgravia SW10 Pimlico Water Softener Repairs SW7 Cornwall Gardens SW5 Fulham SW6