

Our Low Energy Heritage

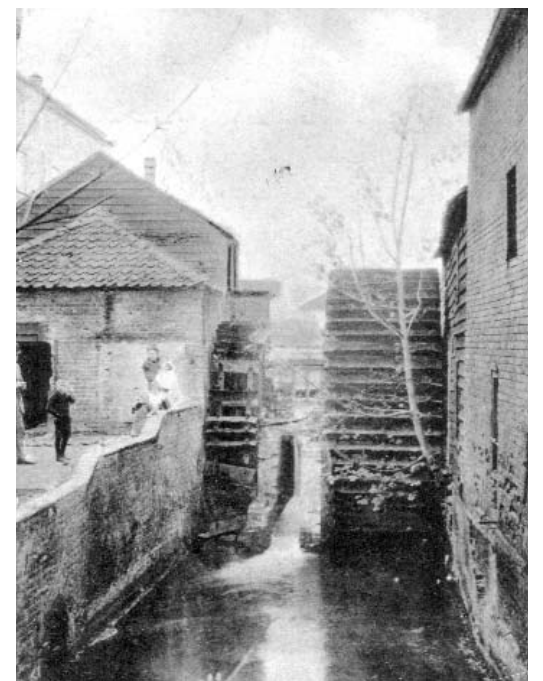
from past to present

Our Low Energy Heritage is a project which looks at the lives of those in the London Borough of Sutton in times past and records the experiences of the older generation. This generation lived through times of shortage, when energy was less cheap and less available.



Reminiscence session

We can use their knowledge and experiences to help us, and future generations, tackle issues such as climate change and an increasingly expensive, less plentiful energy supply.



Water wheel on the Wandle at Butter Hill

This doesn't mean we need to go back to living the way we did in 1930 or 1860. We now benefit from modern technology such as solar panels, wind turbines and improved insulation. These technologies will help us to create low energy communities in the future with a good standard of living and a quality of life perhaps better than today.



Park Lane Wallington, early 1900's



Solar power at the Carshalton Environmental Fair

However, many of the skills our grandparents and great grandparents used on a daily basis have almost been forgotten and re-learning them might not only help us to create a low energy future but also lead to a greater sense of satisfaction for us all.

Our Low Energy Heritage has been supported by the National Lottery through the Heritage Lottery Fund, Sutton Local Studies & Archives Service and EcoLocal Services Ltd. The Our Low Energy Heritage Book is available free through local libraries, or can be downloaded from the website below.



Find out more at: www.ecolocal.org.uk/projects

Energy in the Home

In 1856 Sutton Gas works was established. To make the gas, coal was heated so that it broke down into tar, coke and gas. Gas changed the way many people lived; those who could afford it started to light their houses by gas. Street lights were put up, although at first some local people did not think they were necessary, especially on moonlit nights.

Electricity came quite early to the local area, when Samuel Barrow, owner of The Grove in Carshalton, generated power from the River Wandle for lighting in Stone Court and The Grove. A general supply of electricity was first provided in Sutton in March 1902 by the South Metropolitan Electric Tramways and Lighting Company.

As more houses connected to the Grid, electrical appliances were invented to help the housewife in the "servantless household". However, these were very expensive and far less effective than those we know today.



Solar water heating on a roof in Wallington

"We had a boiler in the kitchen which is where we ate and spent most of our time and did our homework. It heated water to the only radiator in the house which was in the bathroom which is where we all went to get dressed in the morning. The only other heat we had was the sitting room fire, which was wood, which we only used if we had a visitor."

Janet Ringrose

"You only wanted to heat the beds up, and we used to heat up bricks and cover them in a piece of old flannel sheet that had been torn up."

Ena Kemble

"I remember the street lamps, when we used to come home from school, the man used to be going along, putting the gas on with his stick."

Phyllis Wasylofsky

"There was a larder and there was a bowl in which mother put water and we put the milk in that and covered it with a cloth so that evaporation went on and the wet cloth kept the milk cold."

Janet Ringrose

"My husband dug a hole in the garden and filled it round with slates to put the milk and butter in to keep it cool. It kept for two or three days."

Violet

"The floors were covered in Lino so no need for a vacuum cleaner. Mum would put our few little mats over the clothes line and give them a good beating to remove any dust."

Trudy Simpson

"Gran was terrified of electricity, so she had no vacuum cleaner, and used a dustpan and brush to clean the carpets, spreading old tea leaves to lay the dust."

Mary Bates

Britain is Europe's worst energy waster with bad habits, such as leaving electrical appliances on standby, set to cost households £11bn by 2010. Our houses are much more energy efficient than 60 years ago, but heating is still responsible for about 60% of domestic energy use - that's more than 140 million tonnes of carbon dioxide each year.

Do your bit:

Use less energy: Turn appliances off at the mains when you are not using them. Switch lights off in empty rooms, close windows when the heating is on, turn down the thermostat and put on an extra jumper and slippers to keep warm. Only heat the rooms you are using. Use a washing line to dry clothes.

Buy with energy efficiency in mind: Choose an A or A* rated product next time you buy electrical equipment like a fridge or washing machine.

Insulate more: Install draught proofing and insulate your loft. Fit a hot water jacket and consider cavity wall insulation and double glazing.

Switch to a green energy supplier: Change to a green tariff to reduce your emissions and protect the environment.

Install renewable energy technologies: solar water heating, PV solar panels, wind turbines, ground source heating and wood stoves harness natural energy and can add value to your home.

Find out more at: www.ecolocal.org.uk/projects

Water in the Home



Carshalton Water Tower

Before mains water came to Sutton there were 113 wells and boreholes in the area that were sunk in the 19th century. These supplied good clean water, where chlorination was only performed as a precaution. Most of these have now either been discarded or filled in.

In 1860, a water works was proposed, to be built upon Marlin's pit, on Carshalton Road in Sutton, where the Water Gardens are today. This site was previously a supply of lime, and was said to have been a source for the construction of St Paul's Cathedral. The first reservoir was built at Brighton Road, held 500,000 gallons and supplied 12,000 people.

"We didn't have a bathroom, we just used to have a big bath hanging on the wall and we all used to have our bath on a Friday night."

Joyce Auton

"Everyone used the same bath water so whoever got there first got the clean water and you used to fight: 'Get out of it, you had it last week!'"

Hattie Bellinger

"Mondays were wash day. You used to have this great big copper in the corner of the scullery. You'd put the sheets in the copper and boil them up. Tuesdays was ironing day."

Hattie Bellinger

"They had blue bags which went into the washing to give everything a blueish tinge to make everything look nice and white. We used to wash big things in the bath and get in and walk up and down."

Shirley Tennant

"My mother had a big wooden mangle outside on the concrete and weights at the side and wooden rollers and I put my fingers through it. Got my fingers mangled."

Joyce Auton

"If you wanted to put shirts through the mangle you used to have to take the buttons off, put the shirts through the mangle and then sew the buttons back on."

Bill Rickman

Between 1895 and 1907 water consumption went from 20.55 gallons per person per day to 32.88 gallons per person per day. Sutton and East Surrey Water today supply 640,000 customers with 35 million gallons a day. That works out to 54.69 gallons per person per day, about 2½ times that of 1895.

Today we are using and wasting more water than ever. Scientists predict that the temperature in the UK will rise significantly by the year 2060, which will increase the likelihood of water shortages. Already, the Environment Agency has identified the Thames Valley region as having the lowest amount of water available per person in the UK, so we need to make sure we are using water wisely.

Do your bit:

Use less water: fix leaks, take a shower: a bath uses 80 litres of water compared to only 35 litres used by a standard shower. Fit a water saving shower head or share a bath with someone you love.

Fitting a water saving device in your toilet cistern can save up to 1 litre per flush, nearly 2,000 litres per person per year.

Keep tap water in the fridge so you don't have to run the tap for ages to get a cold drink. Only fill the kettle with enough water for your needs. Wait for a full load before using the washing machine and wash your car with a bucket instead of a hose.

Buy with water efficiency in mind: products like sprays for your shower head and taps and water efficient appliances.

Collect and re-use water: get a water butt for your garden, use 'greywater' (water that has been used within the home for washing and bathing) for flushing the toilet.

Monitor your water use: get a water meter.

Avoid flash floods: Keep your front garden for plants not your car. Hard surfaces can't absorb water and can change the micro-climate of your street.

Find out more at: www.ecolocal.org.uk/projects

Transport

Sutton's growth as a town was primarily due to its transport links, in particular the London to Brighton Turnpike Road (now the Brighton Road) and later the railway. Before 1845 Sutton was a small village, smaller than Cheam, but the coming of the railway line and subsequent release of local land enabled an increase in the town's prosperity.



Locals standing on their bicycles to view the aftermath of the bombing of Croydon Airport in 1940.

The new railway took Sutton from an agricultural economy to an expanding dormitory town and a commercial economy. Easy and rapid access to and from the

City of London by railway made it a desirable residential area for city workers, leading to housing development and a need for retail and service industries.

Cycling was the most favoured form of transport in this period and the first individual form of transport for the not very wealthy. Most people could not afford to drive cars and those that could were the rich elite. Cycling was regarded as safe, slow, clean and practical - perfect for suburban life. Motor transport was generally despised, and preferential treatment was given to bicycles on the roads.

"My father took my sister and me for one weeks' holiday a year. We went to Ramsgate and travelled by steam train. We always booked seats with our back to the engine so we didn't get troubled by smuts coming in the window. At the station there were always several young boys with hand-made carts willing to cart our suitcase to the boarding house for a few pennies."

Mary Bates

"They sent me to my Aunt's in the holidays to keep me busy. My Dad would take me on the back of his bike, we were great cyclists, I would sit on the back, I was pillion."

Dorothy Terry

"In later years I would cycle 50 or 60 miles to see my grandparents."

John Gallon



Cyclists gathered for the Wheels of Steel event

"We had about a two mile walk to school because we couldn't afford the penny bus fare. When I got a little bit older I had a bicycle to go to school."

Alma Edwards

"We all walked to school didn't we? Nearly all of us. There used to be horses on delivery vans and mother was always on the look out for any dung that was dropped on the road. She used to whip out with a bucket and a shovel that was kept near the door."

Janet Ringrose

Today, transport is the fastest growing contributor to CO₂ emissions in the UK. In 2008, 53% of Sutton residents travelled to work by car, 38% of these journeys were less than 3¼ miles and 66% less than 6.5 miles - a half hour cycle. Nationally, total road traffic has grown by 82% since 1980.

Do your bit:

Drive less: Leave the car at home for short journeys. Share car journeys and reduce single occupancy car travel as much as you can.

Use Alternatives: Taking public transport, cycling or walking instead of the using the car saves money, can lower stress levels, be faster and save

hassle finding somewhere to park. Walking and cycling can also make a real difference to your health.

Stay local: Holiday in the UK or visit Europe by train. Airliners burn huge quantities of fossil fuel and are now the fastest-growing contributor to global warming.

Find out more at: www.ecolocal.org.uk/projects

Food

The Borough was once highly self-sufficient in food. In the 1830s, the five villages of the borough of Sutton were surrounded by fields of wheat, oats, barley and dairy cattle. The large area of downland to the south was used for grazing sheep. These drier chalk slopes were also suitable for growing herbs such as lavender and mint.



Barrow Hedges Farm

Fresh vegetables and fruit were often grown at home or could be bought from the smallholdings along Woodmansterne Lane (Wallington) whose owners called in a van.

Non-perishable food had to be bought in bulk at the

appropriate season and then stored carefully. Fruit and vegetables could be bottled or preserved. People were more likely to scrape the mould off food rather than just throw it away. Well-peppered meat kept off flies (instead of refrigeration) or it could be wrapped in cloth and buried in a hole in the ground.

"When we had dripping it had jelly in the bottom. We never heard of cholesterol as kids. Monday we used to have the meat that was left over from Sunday cold with mashed potato and pickle. Or bubble and squeak."

Mary Wake

"Stuffed sheep's hearts were very nice, stuffed with sage and onion stuffing, breadcrumbs and onion. You could slice it like a joint."

Bill Rickman

Nothing had a use by date on, mum used her eyes and nose - if it smelt and looked ok we had to eat it."

Trudy Simpson

"You can make a casserole go a long way by adding little bits and pieces that are lying around, but casserole was favourite of the day."

John Gallon

"We used to collect dandelion heads and my father used to make wine."

Ann Murrells

"We never bought a vegetable for 23 years because I had an allotment. I enjoyed it, it was hard work, but it was good."

Jack Elfred

"Mum used to use Kilner jars and pickle onions and in the bottom of the larder (pantry) there were large stone jars containing pickled eggs and green beans."

Jennie Rookledge



The One Planet Food Project, funded by the National Lottery Local Food Fund, is encouraging a return to local food production in the borough

Much of the energy we consume, and therefore the carbon we emit, comes from the production and distribution of the food we eat. 10 calories of oil are typically consumed to produce one calorie of food including chemical fertilizers, pesticides, transport and packaging. Many of the products we buy in supermarkets will have travelled thousands of miles.

Do your bit:

Buy locally and seasonally: Cut the distance your food has travelled and support local producers by buying local, seasonal food if you can.

Buy organic: A recent UK study found organic farms use 26% less energy than non-organic farms to produce the same amount of food.

Buy less: About 8.3 million tonnes of food is thrown away by households in the UK annually costing the average

family £680 a year. Plan your weeks' meals, make a shopping list and buy only what you need.

Grow your own: Get an allotment, dig a veg patch in your garden or grow food in containers for a personal supply of locally grown food - it's good exercise too!

Eat less meat: A plant-based diet uses substantially less energy than a diet based on animal products, as well as being healthy.

Find out more at: www.ecolocal.org.uk/projects

Shopping

As the coming of the railways improved transport links, Sutton and its surrounding villages began to change from agricultural villages to dormitory towns. Agricultural suppliers were replaced by shops dealing in luxury items such as electrical goods, drapers and milliners and motor



Cheam Village before redevelopment, looking up past the Harrow Inn

mechanics. Small family businesses, such as Pearsons and Odd's, flourished, although popular chain stores, such as Sainsburys and the Home and Colonial Stores began to appear after 1890.

Despite increasing wealth locally, for many people life was hard and most had to keep to a strict budget and "make do" to live within their means. Repairing and recycling

were a feature of everyday life; bicycles, pots, pans and shoes were all mended. Long before the shortages of WWII, clothes, toys, food and other items would generally be made or grown yourself. Raw materials were precious and there simply was not the range of goods on offer in the shops today, even if you could afford them. If money got short you might have to resort to the pawn shop, to borrow against what you owned until payday.

"We just had a parade of shops and each shop was separate. The grocers and the bakers and the butchers. We had a couple of what were called 'pay and take' shops which were self-service and we understood they were some of the first in the country. When we had a Sainsburys, the counter had cheese in one place, butter and margarine and you used to have to queue up at each separate bit of the counter for what you wanted, so that took quite a long time."

Patricia James

"There were always rag and bone men, always, just either with a cart or horse - that was the recycling in those days."

Peter Curtis

"I can remember going to the Pawn Shop with my mum, with an old pram that she'd got. In those days you could pawn anything. The bedclothes off your bed, the curtains, the lot."

Doreen Cook

"In the early days we used to use newspaper as toilet paper. We used to cut it into little squares and put a hole in it and put a string through it."

Hattie Bellinger

"I was one of ten children and my father used to mend all our shoes."

Nelly Arnold

"If we had a sheet that had gone a bit thin my mother used to cut them up and make pillow cases out of them."

Edna Brewster

Products and packaging require energy and raw materials (often oil) and so add to our carbon footprint. In Sutton around a third of our waste is recycled. Rubbish rotting in landfill produces methane and leachate, which adds to global warming and can pollute our water courses. Simply buying less has the added bonus of helping us to get out of debt which means we can work less and enjoy life more.

Do your bit:

Reduce: Only buy the things you really need; make a shopping list and stick to it; take reusable bags with you and buy goods that last. Take good care of your clothes and belongings - repair and clean regularly to make them last longer. Cancel unwanted Direct Mail and put a note on your door to stop unwanted leaflets.

Avoid disposables: Use washable handkerchiefs, razors with replaceable heads and, if you have small children, try using real nappies.

Re-use: Buy second-hand from a

charity shop or eBay. Offer unwanted possessions online at sites such as freecycle. Compost your food waste.

Repair: from bikes and electrical items to clothes and furniture. Learn skills such as sewing, knitting, darning or upholstery so you can repair and make things for yourself.

Recycle: All paper, cardboard, cans, plastic bottles, drinks cartons, glass bottles and jars should go in your green wheeled bin. Textiles can be collected too, if you have a label from the council. Other items can be recycled at the Reuse and Recycling Centre in Kimpton Road.

Find out more at: www.ecolocal.org.uk/projects

Health and Wellbeing

In 1883 average life expectancy in England and Wales was 44 for men and 47 for women; illness and death was a routine part of everyone's life. Until the establishment of the National Health Service in 1948, local healthcare was rather ad hoc and people had to pay to go into hospital. Workers on lower pay could see a doctor there for free, but their wives and children could not.

Wealthier people fared far better than the poor, as they could afford to pay for treatment or insurance.

Poor people relied heavily on the charity of doctors or home remedies. There were no 'sickness benefits' so people dreaded becoming ill as this could mean serious poverty or even ending their days in the workhouse.

Locally, many people took out a share in a Slate Club, Loan Club or Friendly Society in order to be able to pay their doctor's bills when sick.



The Cottage Hospital, Rochester Road, Carshalton - precursor to the War Memorial Hospital

"If you had a cough you used to have lemon and honey. Or you might have a little block of camphorated oil which you'd tie round your neck in a little bag,"

Hattie Bellinger

"We used to have our medicine for our bowels on a Friday night - syrup of figs."

Bill Rickman

"Poultices were terrible. If you had a boil or something, they got a bowl and put this ointment in it, but it was red hot and it was just so painful, just boiling hot, hotter it was the better, that was the theory, but it was just inhuman."

Peter Curtis

"I wanted to be engaged when I was 18 and father said "No, wait until you are 21 and then we'll talk about it.", and poor old Trevor died before I was 20. He got rapid Tuberculosis, which in those days they hadn't got a cure for."

Ruby Tilston

"You didn't need any social services with the neighbours, they got to you before the Social Services did ...you could leave your front doors open in the old days, you couldn't do that now."

Ruby Bechtold

It is predicted that climate change will impact hugely on people's health, with frequent heat waves, new diseases and increased mental stress. Hotter summers are likely to lead to increases in skin cancer and cataract cases, as well as an increase in deaths at times of extreme temperatures. It is also predicted that malaria will make a return to Europe as temperatures rise.

The NHS is one of the biggest carbon generators in the UK, responsible for 18 million tonnes of CO₂ each year. As with all other areas of life, the NHS will have to work to reduce its carbon footprint in the future.

Do your bit:

Keep yourself healthy: Stay active, get fit, eat healthily - eat five portions of fruit and veg a day, eat less meat and exercise for at least 30mins everyday. Try growing and making your own home remedies for minor ailments.

Keep your mind active: Learn a new skill or teach what you know to someone else. Volunteer for a community group or charity, get involved in a local

project and make a difference.

Keep sociable: Get to know your neighbours. Smile and chat with other people. Hold a street party as part of the Big Lunch. Give something to others, even if it's just your time.

Low Energy Leisure: Rediscover traditional pastimes such as board games, going for walks or bike rides or join local clubs and societies.

Find out more at: www.ecolocal.org.uk/projects

Industry and Employment

Until Victorian times, local industry centered around the Watermills of the Wandle. The Romans discovered that its fast flowing waters supplied enough power to turn water wheels to grind corn, and the Domesday Book records at least 13 mills: by 1610 this figure had grown to 24.



Preparing the retort for distilling mint at Miller's works, Hackbridge

At its height, some 60 wheels were in operation, leading to the Wandle being called 'the most industrialised river in the world'. Flour, snuff, copper, leather, printing and brewing all flourished along its banks.



The new lavender still at the Carshalton Lavender Project

In the 19th century lavender, mint and watercress were important local industries. During the 20th century new technologies emerged; telecommunications companies such as Mullards and Marconi, and chemical and plastics production all became major local industries.

"My dad was a firewood merchant, he used to split trees or timber. He had an electric machine in the yard which used to saw the wood up into shorter lengths. They used a sledgehammer to split them, cross cut them, put them on a seam and make logs. We used to make bundles of wood then like that and we used to supply them to shops and then they resold them."

Bill Rickman

"My dad worked on the Surrey commercial docks and my mum was a cleaner, until she got a job as a cook in a posh house in Battersea. When I first started work I earned half a crown which was two shillings and a sixpence. I had to give two shillings to my mum for my keep and sixpence had to last the week for whatever you wanted. I was on munitions. I was a welder. I used to weld the two sides of jerry cans together."

Hattie Bellinger

"I became a secretary. Up until 13 I was in a normal school and then 13 - 15 I was in commercial training at Pittmans College; short hand, typewriting and bookkeeping. I got £3 15s. Some went to my mother for housekeeping, and she always taught us to save for a rainy day, so I saved."

Joy Juster

As we move into an era of oil depletion and energy constraint, everything from transportation to medicine and food will be affected because almost everything we do is dependent on oil. The transition to a future with a reduced oil supply will require the development of clean, reliable, and renewable energy sources and reduced oil consumption.

Do your bit:

Buy local: Support locally owned businesses; this keeps money in the local economy, as they often employ local people and purchase from other local businesses and service providers.

Local Currencies also keep money in the local economy and support local businesses. A LETS scheme (Local Exchange and Trading Scheme) allows local people to share and exchange skills and services without using money.

Get involved: A low energy future is going to require changes in public policy and planning consent for local energy production. You can help this process by getting involved in local decision making and consultations contacting your local representatives, your council or attending local meetings.

Try it yourself: Have a go at living with an energy rationing system by taking the carbon challenge in the Our Low Energy Heritage book.

Find out more at: www.ecolocal.org.uk/projects