

THE WINDY ISLES

The Galapagos islands take steps towards a fossil fuel-free future, as San Cristóbal's wind and solar capacity is significantly expanded

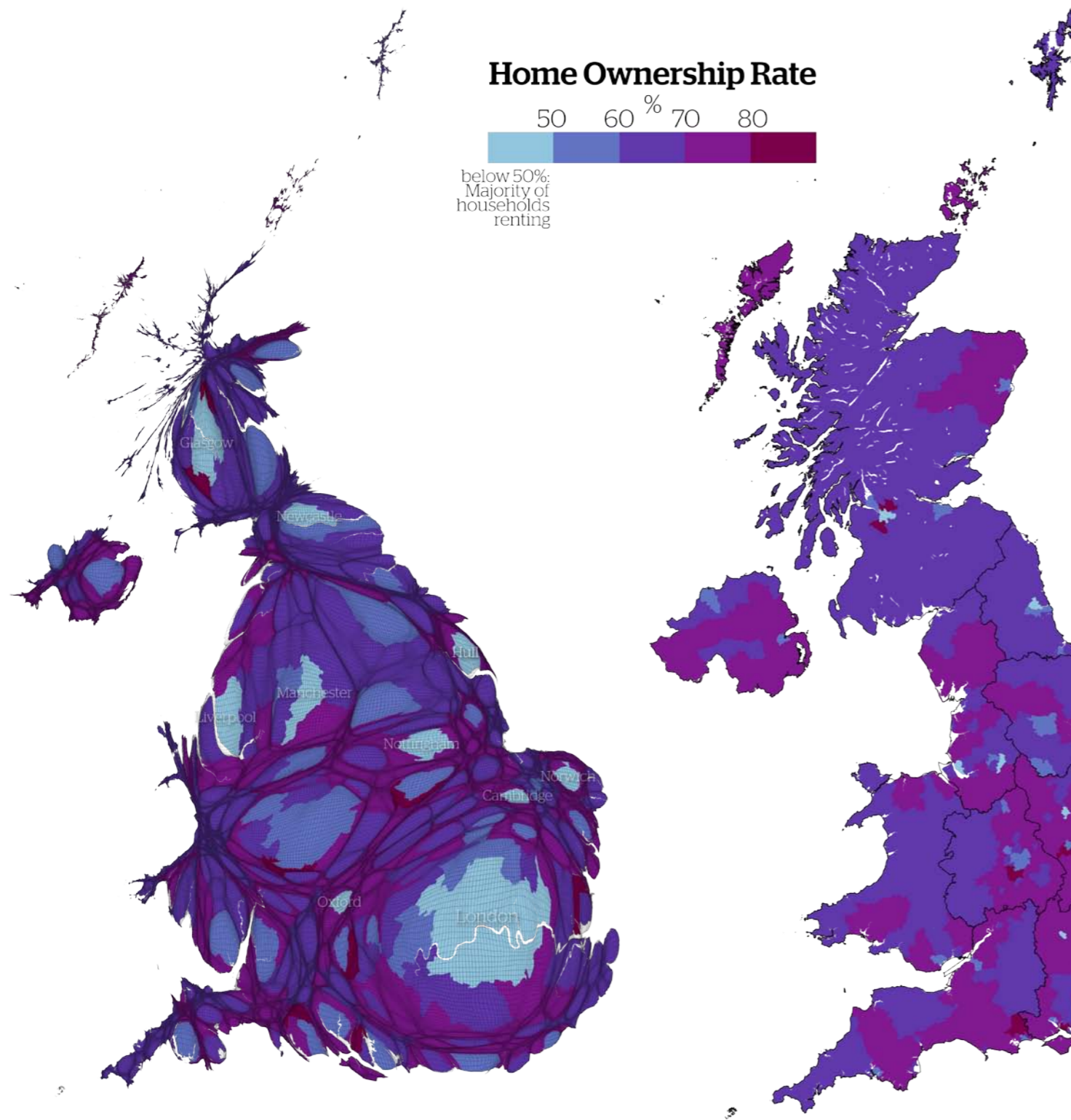
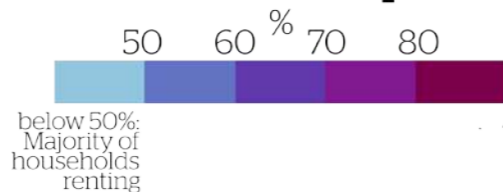
On 16 January 2001, the tanker *Jessica* was delivering 240,000 gallons of diesel and intermediate fuel oil to a dispatch station on Baltra Island, Galapagos Islands, when it ran aground on Wreck Bay, San Cristóbal. Fuel began gushing from a tear in the ship's hull, a serious threat to the sensitive ecosystem. Only the quick actions of the US coast guard and some favourable sea currents prevented the incident turning into a major environmental disaster.

It was the perfect illustration of the risks the islands were running on a regular basis, shipping large quantities of diesel over from the mainland in order to keep the then 18,000 (now 30,000) inhabitants' lights on, and why, for several years, the government of Ecuador had been developing a project to begin construction of renewable energy sources on San Cristóbal, the second-largest of the islands. Completed in 2007, the San Cristóbal Wind Project (SCWP) now consists of three 51m-tall wind turbines and a pair of solar panels, which are estimated to have saved 8.7 million litres of diesel and 21,000 tonnes of carbon dioxide emissions over the last eight years and now supply 30 per cent of the island's energy needs.

Now plans are afoot for a major expansion to the current operation, with the ultimate goal being the elimination of fossil fuels from the energy supply entirely. The plan is to meet the anticipated 60 per cent increase in electricity demand by 2024 by erecting a fourth turbine, alongside greater solar capacity and a battery storage system.

One concern in relation to the SCWP is whether additional wind turbines could have an adverse effect on the isolated bird populations of the 19 islands, including the famous blue-footed booby and the endemic Galapagos petrel, listed as 'critically endangered' by the International Union for Conservation of Nature. A 2010 study by scientists affiliated with the Charles Darwin Foundation determined that 'wind farms will not be more detrimental to petrels than other existing man-made structures', largely thanks to the turbines being located on a hill known as El Tropezón, an agricultural area distant from nesting sites. No petrels are known to have been injured by wind turbines during the past eight years. The study did, however, propose the implementation of a monitoring program, to assess the long-term effects.

Home Ownership Rate



owning a place outright: 40 per cent of the residents own a property with a mortgage or loan (equal to 33 per cent of households); 26 per cent live in properties that are owned outright.

England has the highest share of residents living in properties rented from a private landlord or letting agency: 16 per cent live this way. London particularly stands out, with more than half of all households (50.4 per cent) renting in the capital, followed by the northeast of England with 37.8 per cent.

House prices and the overall economic situation of people are the most influencing factor in these developments. Looking at long-term trends, data from the Land Registry shows that 20 years ago average house prices in London were at £92,000 at the start of the year, and there was no English region then where the average value of property was less than half the average value in London. By 2005, average property prices in London had increased to around £275,000, now more than twice the value of average property in every other English region apart from the southeast and southwest. These prices across the country reached an average of around £170,000 per property, 2.6 times the average price a decade earlier.

Although the financial crash brought some consolidation on the housing market, with a low point in sales in early 2009, by 2015 the prices were already back to pre-crisis levels that made owning a property less and less affordable for an ever growing amount of the population. These two maps show the world of owning versus renting in the United Kingdom using official census statistics. Mapped are the shares of home ownership amongst households (including those owning either outright or with a mortgage/loan, or on a shared ownership). The basemap used in the cartogram on the far left is an equal population projection, based on a gridded cartogram transformation where each grid cell is resized proportionally according to the number of households in that particular area. The second map shows the same data but on a regular sized UK map for comparison.

The maps show that renting is more prevalent in the densely populated urban areas, but also that the trend to a majority of households renting their home is widespread across the country, from Glasgow in the north to the inner parts of London. The peak of ownership reached in 2001 now seems a distant past, with close to half the households now renting in the urban centres across the United Kingdom.

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CARTOGRAMS

THE HOME FRONT

BY BENJAMIN HENNIG

Housing has always been a decisive and sometimes divisive political issue. Home ownership has always been an aspiration for people, so that in the post-war period between 1953 and 1971 the amount of households renting and owning reached an equal level, as documented in official census statistics for England and Wales. Ownership then surpassed renting, reaching its peak in 2001 at 69 per cent. In the decade that followed, these levels were falling for the first time: In England and Wales, the number went down to 64 per cent.

According to the most recent census of the home owners in the whole of the United Kingdom, most live in properties owned with a mortgage or loan rather than