World Regional Renewable Fuel Sources Total renewables in Gigawatts

36.34 GW 1527 GM **Eurasia** 86.9 GW 29.79 GW 162.7 GW 98.22 GW 81.1 GV Europe 441.0 GW **North America** 29.37 GW 143.8 GW 294.2 GW 162.3 GW 86.9 GW 87.97 GW **Middle East** 16.2 GW **Asia** 728.8 GW Central America 435.6 GW 175.9 GW & the Caribbean 10.9 GW Africa 34.0 GW South America 179.2 GW 151.8 GW Renewable fuel sources 5.12 GW Oceania hydro 24.0 GW wind sola Source: IRENA (2016) http://resourceirena.irena.org/gatewav/dashboard/?topic=4&subTopic=17 http://www.irena.org/DocumentDownloads/Publications/IRENA_RE_Capacity_Statistics_2016.pdf

CARTOGRAMS



BY BENJAMIN HENNIG

Renewable energy is defined as 'energy from a source that is not depleted'. Main sources include biomass, hydropower, wind, biofuels, solar, heat pumps, biogas, geothermal and marine (such as tidal power). Data by the International Energy Agency sees the share of renewable energy in global power generation at 22 per cent in 2013, with an estimated increase to 26 per cent by 2020 as a result of supportive policies by a large number of governments.

The capacity of renewable energy produced in the world has grown by over 47 per cent in the past five years, according to statistics by the International Renewable Energy Agency (IRENA). In 2015 alone the world saw a growth of 8.3 per cent in renewable power generation, the highest annual growth rate ever recorded. By the end of last year, a capacity of 1,985GW existed globally. This is 5.3 times the amount of energy produced by all nuclear power plants. All countries in the world have at least one abundant renewable resource, but the role of renewables in domestic energy production varies significantly depending not only on the overall energy potential and demand but also on political and economic decisions made by different governments. In the European Union, the share of renewable energy was around 15 per cent in 2014, with a political target of increasing this to 20 per cent by 2020. The above map provides a global overview of the

installed renewable energy capacity across main regions in 2015 as documented in IRENA data. The depiction is a circular cartogram in which the areas of each circle relates to the total power capacity in four main sources of renewable energy: Hydropower (which accounts for approximately 53 per cent of global renewable energy capacity), wind (22 per cent), solar (11 per cent), and bio (five per cent, here including solid biomass and biogas).

Regional distribution currently puts Asia first in global renewable energy power capacity (40.1 per cent of the world total), followed by Europe (25 per cent), North America (16.6 per cent), South America (91 per cent), Eurasia (including Russia, the Caucasus, and Turkey, 4.5 per cent). The remaining regions are around one per cent each.

Most notable in this distribution is Africa's small share. Despite a large potential for renewable energy in all major sources, economic means to invest in such technologies plays an important role. Many countries on the continent could benefit from more concerted investments to utilise their resources in order to strengthen sustainable growth in a region with potentially the most significant population increase in the forthcoming decades. Energy security and environmental sustainability will be one central element in leading the whole continent's economic transition.

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ECONOMICS

MONEY MAKERS

Zimbabwe prints more money, prompting fears of a return to the hyperinflation of the country's past

As printing presses begin to warm up again in Harare, savers across Zimbabwe are slowly forming queues at banks in the country to withdraw their cash, some at a limit of \$20 per day. The government's announcement to start printing local denominations of US dollars has locals afraid of a return to the Zimbabwean dollar.

Before it was scrapped, the Zimbabwean dollar caused record-breaking hyperinflation for almost a decade. At its worst in 2009, 100 trillion Zim dollars barely bought a loaf of bread, while the equivalent of US\$1 had 33 zeros. To ride out an economic disaster, the central bank adopted nine currencies as legal tender including the South African rand, the euro and the Chinese yuan before officially anchoring itself to US dollars to control inflation. The original notes are now worth more as a novelty on eBay than they ever were on the market.

However, in a move to ease a cash crisis caused by larger imports than exports, the central bank intends to begin printing again. The 200 million shiny new 'bond notes' are allegedly backed by US\$200 million borrowed from the African Export-Import Bank. They are intended to always be worth the equivalent of the American variety.

'In principle this is a good idea,' says Manoel Bittencourt, Associate Professor of Economics at the University of Pretoria. 'The Zim central bank keeps the economy stable by keeping "bond notes" on par with the US dollar. However, in practical terms, who is going to believe that the Zimbabwe central bank is going to keep its promise, without the anchor of the US Federal Reserve System?' He believes that the plans, though they make sense on paper, may fail to convince Zimbabweans. Many worry that bank accounts of US dollars will be changed into bond notes.

'One thing we always have to bear in mind is that inflation - and hyperinflation - hurts the poor,' says Bittencourt. 'Meanwhile, the upper classes are able to find ways of protecting themselves against inflation with dollars or indexed bank accounts. If I had US dollars in my bank account in Zimbabwe, I would want to make sure the government does not "transform" them into something else, wouldn't you?"