

Winds of change? Attitudes toward renewable energy policy in Mauritius

Afrobarometer Dispatch No. 127 | Andreas Kopf and Thomas Isbell

Summary

In recent decades, the number and intensity of climate-related hazards such as floods, hurricanes, tropical cyclones, landslides, heat waves, and droughts have increased around the world (Emanuel, 2005; Coumou & Rahmstorf, 2012). Among climate scientists, there is a broad consensus that these increases are associated with global warming caused in large part by human activity (Hansen, Sato, & Ruedy, 2012; Intergovernmental Panel on Climate Change, 2014). Due to the far-reaching and potentially disastrous consequences of global climate change, scientific research and public debate on this topic have expanded dramatically over the past two decades.

Small Island Developing States (SIDS) are among the countries most vulnerable to the impacts of climate change, including rising tides, coastal erosion, ocean acidification, more intense cyclones, and an increase in the occurrence of floods and droughts. In Mauritius, a SIDS in the Indian Ocean east of Madagascar, such changes would threaten the tourism industry (a central sector of the island's economy) as well as agriculture.

To help mitigate these risks, the government of Mauritian Prime Minister Anerood Jugnauth has taken steps to combat further climate change and its ramifications. Though hardly a major contributor to the causes of climate change, Mauritius was among the first countries to ratify the Paris agreement adopted at the Conference of Parties (COP 21) to the United Nations (UN) Framework Convention on Climate Change in December 2015 and to submit its Intended Nationally Determined Contribution (INDC) to reduce the country's greenhouse gas emissions after 2020. The INDC provides that Mauritius will lower its emissions by 30% by 2030 (Republic of Mauritius, 2015). To reach that aim, the government has committed itself to decarbonize its energy sector – currently largely dependent on fossil fuels – through major investments in renewable energy sources such as solar, wind, and wave energy.

While Mauritius' commitment is linked to access to climate funds by international donors (e.g. the World Bank's Clean Technology Fund, the Global Environment Facility, and the Sustainable Energy Fund for Africa administered by the African Development Bank), a shift toward cleaner energy technologies would likely also lead to higher electricity costs for industrial and private consumers on the island. The success of the government's ambitious renewable-energy plans thus depends on the support of voters.

What are citizens' attitudes toward decarbonizing energy production? The 2014 Afrobarometer survey asked Mauritians whether they think the government should invest in the production and use of clean energy even if this would mean higher electricity bills. Findings show widespread public support for clean energy, particularly among educated citizens, with reservations among some sub-groups that may inform approaches as Mauritius and other African countries move toward sustainable energy.

Afrobarometer survey

Afrobarometer is a pan-African, non-partisan research network that conducts public attitude surveys on democracy, governance, economic conditions, and related issues across more than 30 countries in Africa. After five rounds of surveys between 1999 and 2013, results of Round 6 surveys (2014/2015) are currently being published. Afrobarometer conducts face-to-face interviews in the language of the respondent's choice with nationally representative samples of 1,200 or 2,400 respondents.

The Afrobarometer team in Mauritius, led by StraConsult, interviewed 1,200 adult Mauritians in June and July 2014. A sample of this size yields country-level results with a margin of error of +/-3% at a 95% confidence level. A previous survey was conducted in Mauritius in 2012.

Key findings

- Three-fourths (73%) of Mauritians “agree” or “strongly agree” that the government should invest in clean energy even if it would mean higher electricity bills.
- Support for investment in renewable energy sources is particularly strong among citizens who are better educated, employed, and economically better off, as well as among men and younger respondents.
- Support for clean energy is highest among citizens in the Rivière du Rempart district (90%) and the capital city of Port Louis (89%) and lowest in Rodrigues (44%).
- Citizens who regularly receive news from social media, the Internet, and newspapers are more likely to favour the use of clean energy than citizens who get their news from television and radio.

Decarbonizing energy production

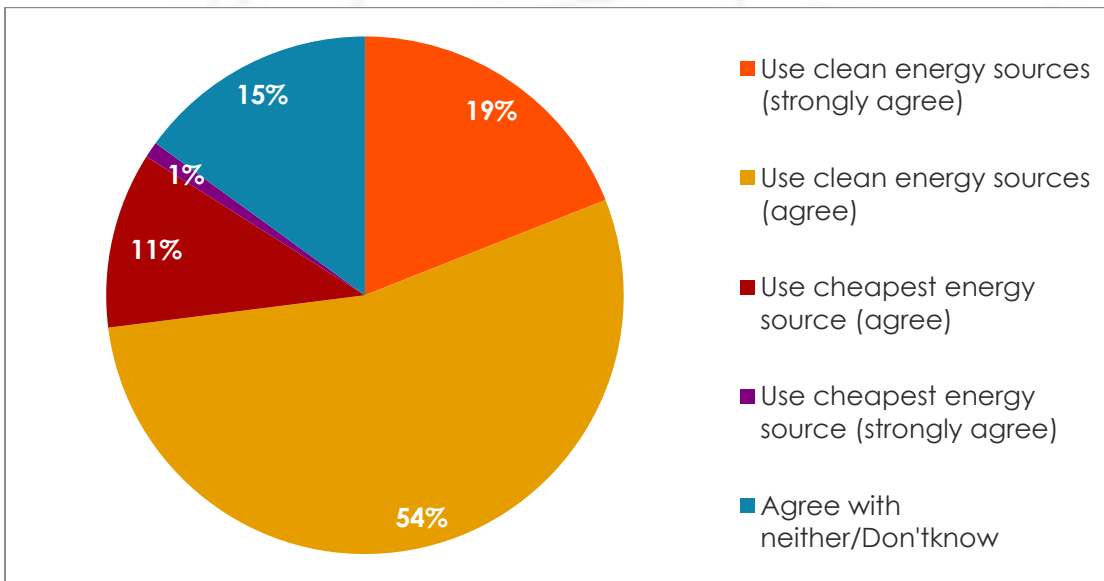
Since independence in 1968, Mauritius has achieved strong economic growth by diversifying its agriculture-based economy through a successful secondary industry and an expansion of tourism. One of Africa's few middle-income countries, Mauritius boasts the continent's lowest level of lived poverty (Mattes, Dulani, & Gyimah-Boadi, 2016) and one of its most stable democracies (Frankel, 2014). Public infrastructure is well-developed on the main island of Mauritius, though it lags behind on the second-largest island, Rodrigues.

Due to its rapid socio-economic development, Mauritius' energy demand has risen consistently over the past three decades. To date, power is mainly generated by thermal power plants using fossil fuels, particularly imported oil, while around 20% is derived from sugarcane-based biogas plants.

Most Mauritians appear receptive to the government's plans to decarbonize the energy industry. Three-fourths (73%) of Afrobarometer survey respondents “agree” or “strongly agree” that the government should invest in the production and use of “clean” energy (such as solar or wind power), even if that would lead to higher consumer bills (Figure 1). Only about one in eight (12%) prefer using the cheapest possible energy source even if doing so would harm the environment, while a similar proportion (15%) agree with neither proposition or say they “don't know.”

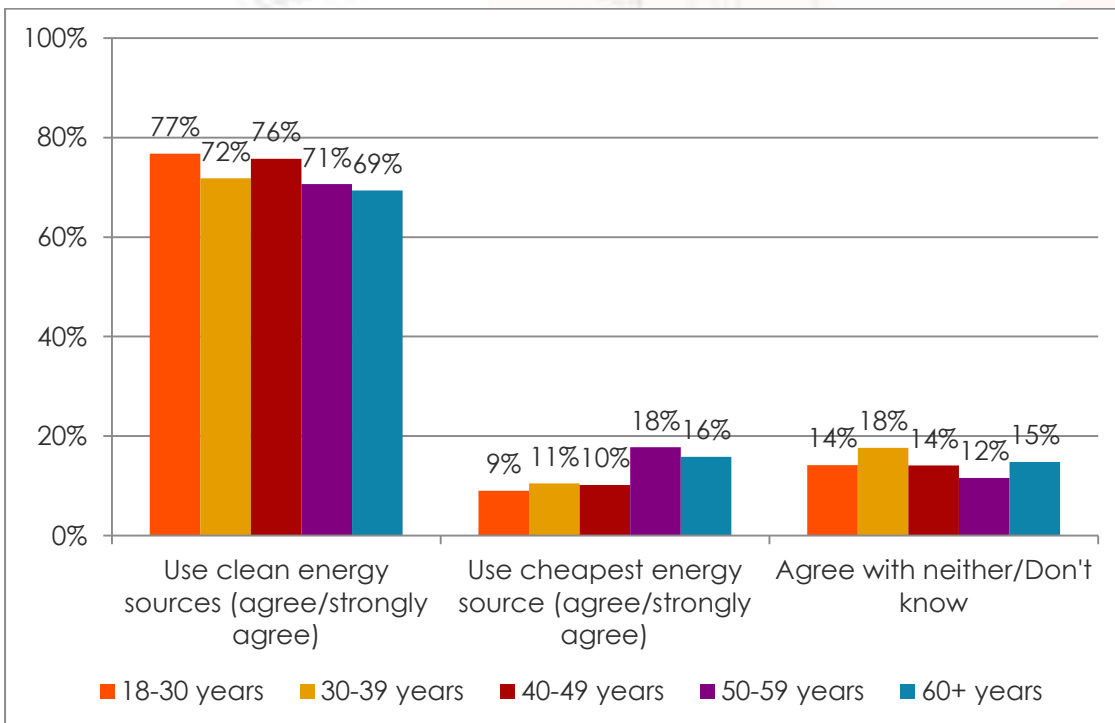
Support for clean energy sources is strong across all age groups. Younger respondents are slightly more likely to favour using sustainable energy sources (e.g. 77% of those aged 18-30 years vs. 69% of those aged 60 and older) (Figure 2).

Figure 1: Attitudes toward renewable energy | Mauritius | 2014



Respondents were asked: Which of the following statements is closest to your view?
 Statement 1: The government should produce electricity from the cheapest possible source even if doing so harms the environment.
 Statement 2: The government should invest in the production and use of clean energy such as solar or wind, even if this means we have to pay more for electricity.

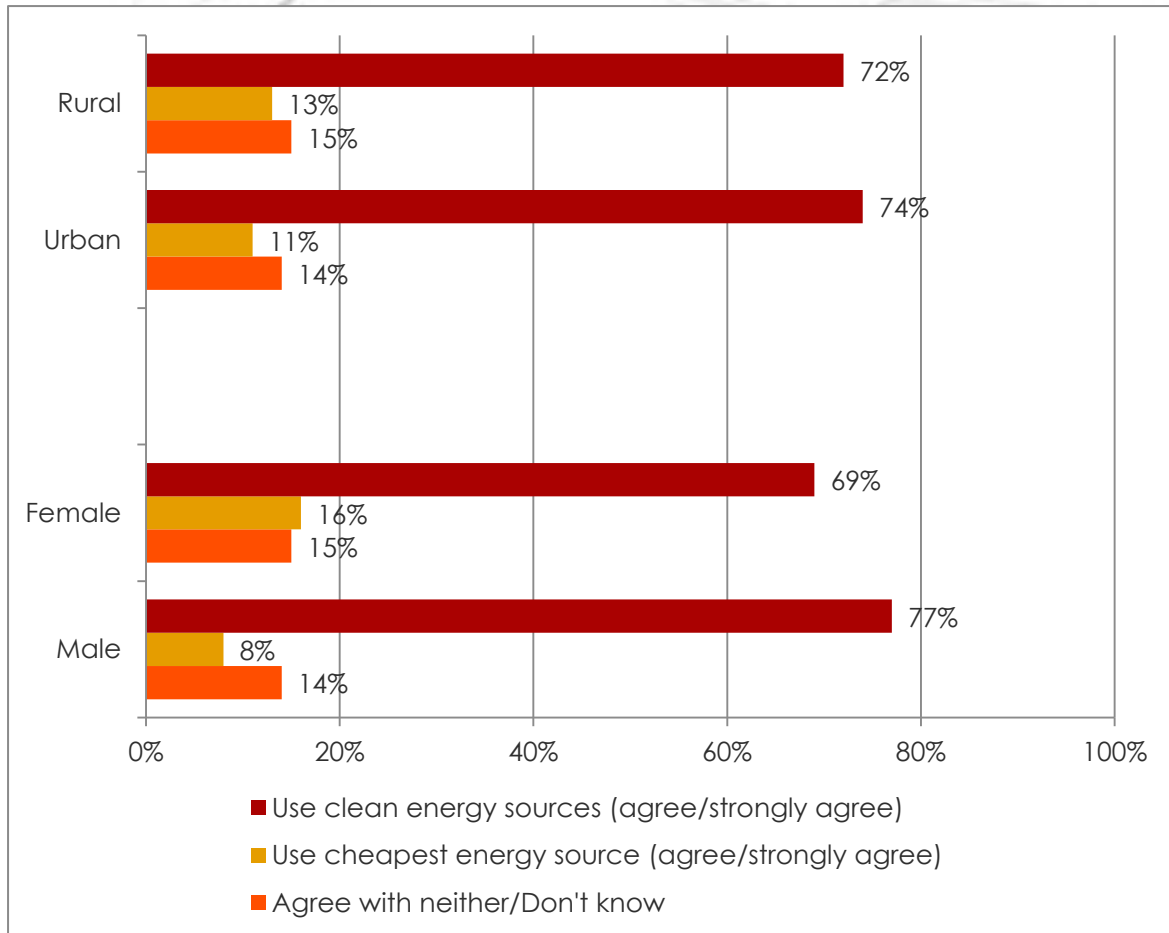
Figure 2: Attitudes toward renewable energy | by age | Mauritius | 2014



Respondents were asked: Which of the following statements is closest to your view?
 Statement 1: The government should produce electricity from the cheapest possible source even if doing so harms the environment.
 Statement 2: The government should invest in the production and use of clean energy such as solar or wind, even if this means we have to pay more for electricity.

As depicted in Figure 3, urban and rural residents are about equally likely to support clean energy. Similarly, both genders favour the use of clean energy, although support is somewhat stronger among men (79%) than among women (72%). Women are twice as likely as men to prefer using the cheapest energy sources regardless of environmental impact, 16% vs. 8%.

Figure 3: Attitudes toward renewable energy | by gender and urban/rural residence
 | Mauritius | 2014

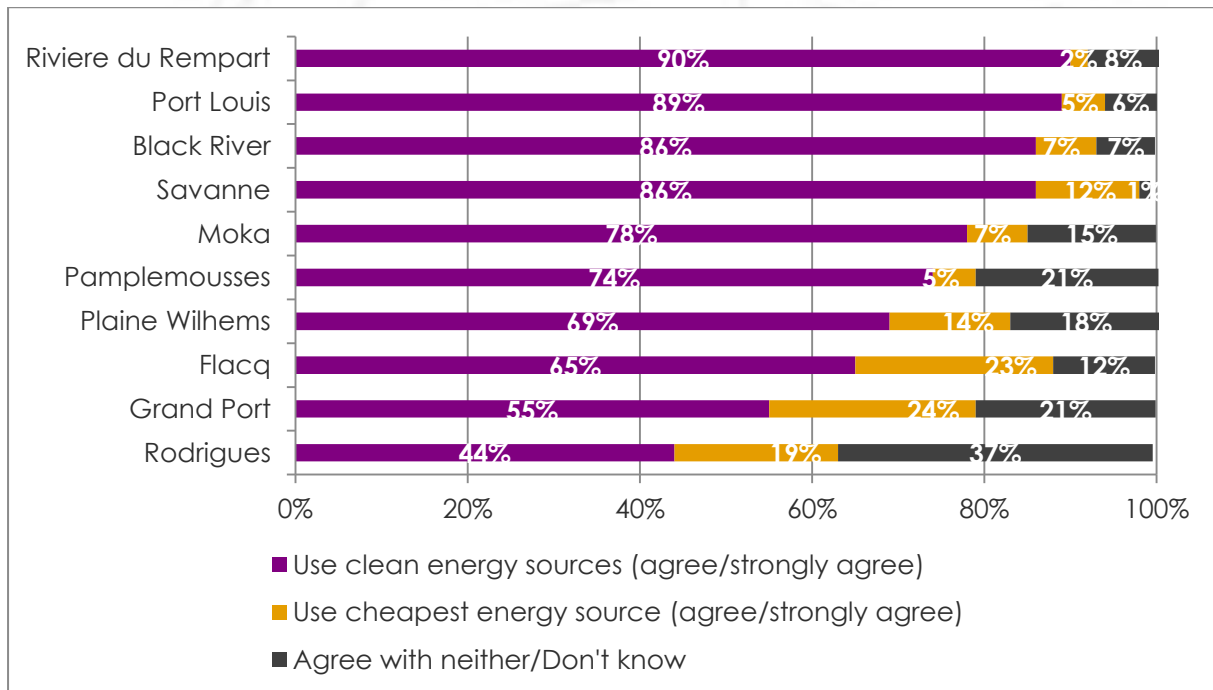


Respondents were asked: Which of the following statements is closest to your view?
 Statement 1: The government should produce electricity from the cheapest possible source even if doing so harms the environment.
 Statement 2: The government should invest in the production and use of clean energy such as solar or wind, even if this means we have to pay more for electricity.

Support for clean energy is the majority view in all of Mauritius' districts except in Rodrigues, the nation's second-largest island (44%). It is highest in Rivière du Rempart (90%) and in the capital, Port Louis (89%) (Figure 4).

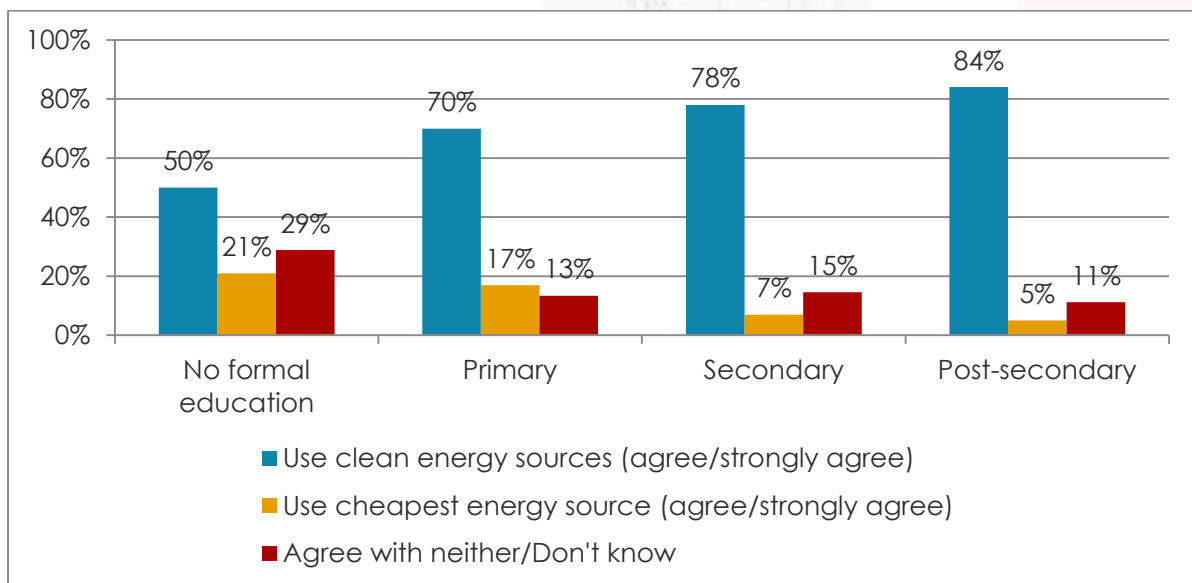
Education appears to have a strong effect on people's views on clean energy. While support for using sustainable energy sources is the majority view even among citizens with no formal education (59%), it climbs consistently with increased educational attainment, reaching 84% among those with a post-secondary education (Figure 5). This is consistent with the complexity of the climate-change issue and its links to greenhouse gas emissions (Pierce, Steel, & Warner, 2009).

Figure 4: Attitudes toward renewable energy | by district | Mauritius | 2014



Respondents were asked: Which of the following statements is closest to your view?
 Statement 1: The government should produce electricity from the cheapest possible source even if doing so harms the environment.
 Statement 2: The government should invest in the production and use of clean energy such as solar or wind, even if this means we have to pay more for electricity.

Figure 5: Attitudes toward renewable energy | by educational attainment | Mauritius | 2014

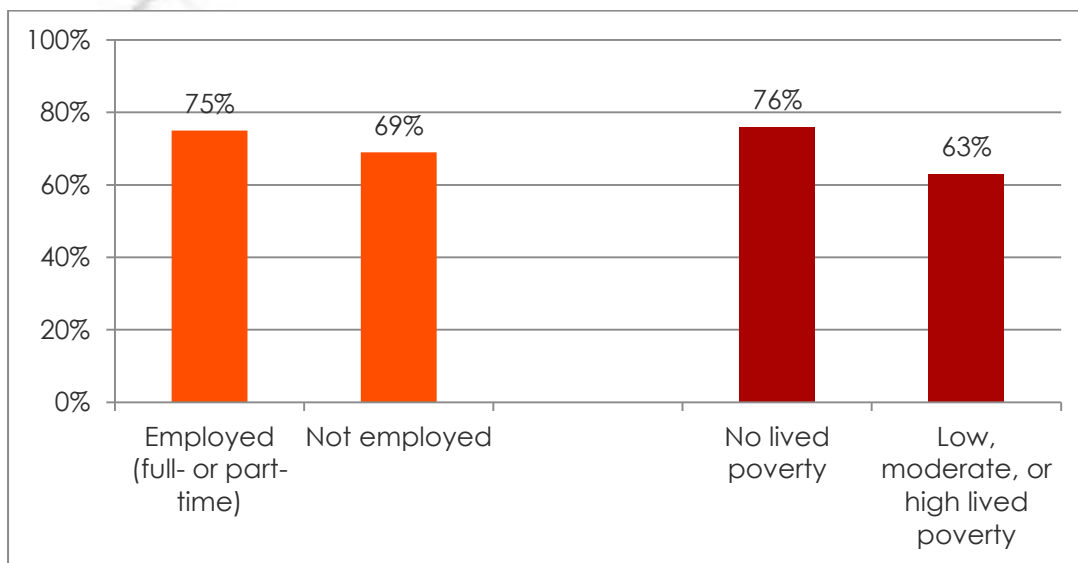


Respondents were asked: Which of the following statements is closest to your view?
 Statement 1: The government should produce electricity from the cheapest possible source even if doing so harms the environment.
 Statement 2: The government should invest in the production and use of clean energy such as solar or wind, even if this means we have to pay more for electricity.

Since the transformation of the energy sector might lead to higher energy prices, straining consumer household budgets, does respondents' occupational and socioeconomic status affect their attitudes toward clean energy?

As shown in Figure 6, citizens with full-time or part-time jobs are slightly more likely to support the use of sustainable energy sources (75%) than those without employment (69%).¹ And support for renewable energy is considerably stronger among economically better-off citizens: Respondents who experienced no lived poverty² in the year preceding the survey are more likely to favour clean energy (76%) than those who experienced some level (low, moderate, or high) of lived poverty (63%).

Figure 6: Support for renewable energy | by employment status and level of lived poverty | Mauritius | 2014



Respondents were asked: Which of the following statements is closest to your view?

Statement 1: The government should produce electricity from the cheapest possible source even if doing so harms the environment.

Statement 2: The government should invest in the production and use of clean energy such as solar or wind, even if this means we have to pay more for electricity.

(% who "agree" or "strongly agree" with Statement 1)

Role of news media in shaping views on clean energy

As demonstrated by other social science research, the media is influential in shaping public opinions about topical and complex issues such as climate change and environmental protection. (e.g. Devine-Wright, 2007; Cacciatore, Scheufele, & Shaw, 2012; Delshad & Raymond, 2013). It therefore appears meaningful to look at the public's consumption of

¹ Employment status was determined by asking, "Do you have a job that pays a cash income? [If yes:] Is it full-time or part-time?"

² Afrobarometer assesses poverty through its Lived Poverty Index (LPI), an experiential measure based on how frequently respondents or their families went without five basic necessities (enough food, enough clean water, medicines or medical treatment, enough cooking fuel, and a cash income) during the year preceding the survey. Using response options of "never," "just once or twice," "several times," "many times," and "always," LPI scores calculated for individuals or countries reflect the extent of deprivation ranging from no lived poverty to high lived poverty.

news from various media sources (radio, television, newspapers, the Internet, and social media) as an indicator for people's engagement with political issues, such as support for mitigating further greenhouse gas emissions through the use of renewable energy sources.

As can be seen in Table 1 below, television and radio are the most frequently used media sources for news in Mauritius: 98% watch TV news and 97% listen to radio news "every day" or "a few times a week." Three-fourths (77%) of Mauritians regularly turn to newspapers for information. Substantial proportions also get news "every day" or "a few times a week" from the Internet (55%) and social media (44%). People appear to use those two sources either very often (at least a few times per week) or not at all: More than one-third (36%) say they "never" use the Internet for information purposes, while almost half (47%) say the same about social media. Differences in news consumption between rural and urban population are highest among these two digital media sources, probably reflecting limited accessibility of online services in rural areas as well as the high cost of Internet services in Mauritius.

Table 1: News consumption | by urban/rural residence | Mauritius | 2014

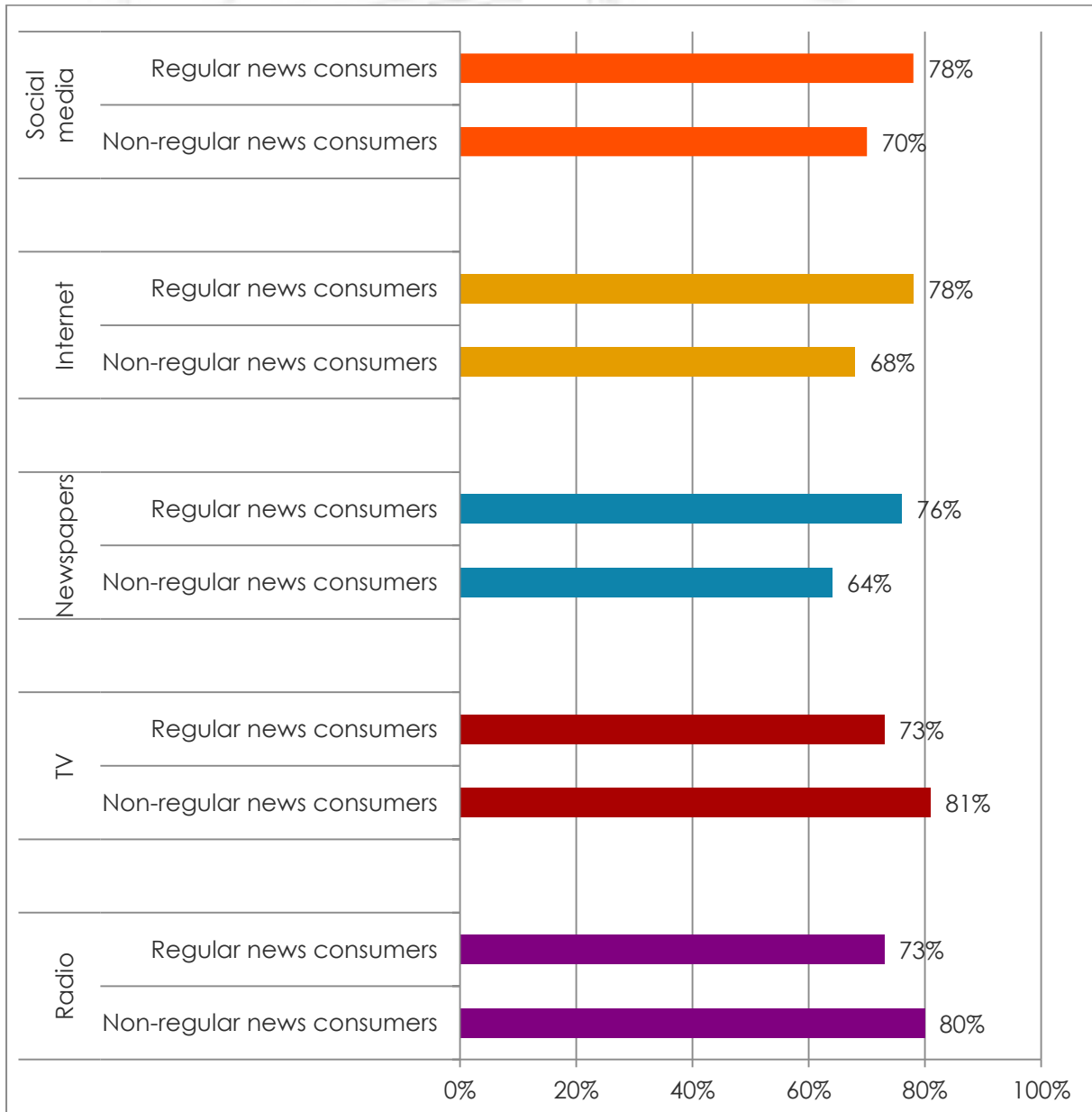
	Regular news consumption (every day/a few times a week)	Non-regular news consumption (a few times a month/less than once a month/never)
TV	98%	2%
Urban	98%	2%
Rural	98%	1%
Radio	97%	3%
Urban	98%	2%
Rural	97%	3%
Newspaper	77%	23%
Urban	79%	21%
Rural	74%	25%
Internet	55%	45%
Urban	60%	40%
Rural	51%	49%
Social media	44%	56%
Urban	48%	52%
Rural	41%	59%

Respondents were asked: How often do you get news from the following sources: Radio? TV? Newspapers? The Internet? Social media such as Facebook or Twitter?

Although television and radio are the most frequently used news sources in Mauritius, they do not appear to have the strongest influence in favour of clean energy. As shown in Figure 7, support for clean energy is somewhat higher among respondents who regularly receive news from social media (78%), the Internet (78%), and newspapers (76%) than among those who regularly receive news from television and radio (each 73%). Moreover, while regular consumers of news from social media, the Internet, and newspapers show greater support for clean energy than those who do not regularly obtain news from these sources, the opposite

is true for TV and radio: Regular consumers are actually somewhat less likely to favour clean energy than those who do not tune in on a regular basis.

Figure 7: Support for renewable energy | by news consumption and types of media
 | Mauritius | 2014



Respondents were asked:

- How often do you get news from the following sources: Radio? TV? Newspapers? The Internet? Social media such as Facebook or Twitter? ("Regular news consumers"="every day" or "a few times a week." "Non-regular news consumers"="a few times a month," "less than once a month," or "never")
- Which of the following statements is closest to your view?
 Statement 1: The government should produce electricity from the cheapest possible source even if doing so harms the environment.
 Statement 2: The government should invest in the production and use of clean energy such as solar or wind, even if this means we have to pay more for electricity.
 (% who "agree" or "strongly agree" that the government should invest in clean energy sources)

Conclusion

Most Mauritians support a move toward renewable energies even if it will raise their electricity bills, a good starting point for the government's decarbonization strategy. Support for clean energy is particularly strong among better-educated, employed, economically better-off, younger, and male citizens. Regular consumption of news from social media, the Internet, and newspapers appears to be associated with stronger support for investment in clean energy. The same is not true of regular TV and radio news consumption, a finding that may point to opportunities for further public education as policy makers develop climate-change and renewable-energy policy strategies.

To further explore this data, please visit Afrobarometer's online data analysis facility at www.afrobarometer.org/online-data-analysis.

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