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As was common last year in the global solar sector, 2023 proved to be a record-breaking year for Belgium"s solar industry. According to the Belgian energy association, Energie Commune, the country installed 1.8GW of new solar capacity last year, breaking the record for annual installations set in 2022 with 1.3GW of capacity and pushing the country"s total operating solar portfolio to 9.9GW.

While this figure hardly leads the European solar sector, record capacity growth is never a bad thing for the industry, and there is cause for optimism in the future for Belgium"s solar sector. According to trade body SolarPower Europe, Belgium installed around 500W of solar generation capacity per person in 2022, meeting the targets set out in its 2019 National Energy and Climate Plan (NECP). However, SolarPower Europe expects this per-capita capacity to jump to around 1,600W by the end of the decade.

In contrast, Italy"s 2019 NECP set a target of approximately 800W per capita photovoltaic capacity. SolarPower Europe forecasts that by 2030, Italy will reach a level below 1200W per capita. This indicates that, on a per capita basis, Belgium"s recent announcement of added electrical capacity has been impressive, with its solar industry poised for exponential growth.

The achievement of this target is attributed to a series of supportive legislations. For Belgians, policies such as rooftop solar subsidies and tax incentives make solar economically viable. This year"s elections could potentially change Belgium"s leadership, hence the sustainability of the recent rapid growth in the solar industry remains to be seen.

According to data from Energie Commune, Belgium"s operational solar capacity has increased annually since 2020. Between 2017 and 2018, annual solar capacity grew by 23%, followed by a 20.7% increase from 2019 to 2020. Between 2022 and 2023, there was a remarkable growth of 37.1%, reaching a new high.

It is noteworthy that in 2015, Flanders, the northern region of Belgium (with a population accounting for over half of the country"s total), saw its annual installed capacity exceed that of Wallonia and Brussels. As illustrated in the following graph, Flanders added 69MW of new solar capacity, while Wallonia added 37MW, and the Brussels region, representing Belgium"s capital, only added 4MW.

Notably, in the years 2016-2017, Flanders solidified its position among the three major regions in Belgium, with its annual capacity nearly doubling that of Wallonia in 2016 and almost tripling it in 2017. This was partly attributed to legislation particularly favorable to the solar industry in Flanders.

In November 2016, the permit process for new solar projects was streamlined, with owners of new projects requiring approval only from the distributed operators Eandis and Infrax, without the involvement of the Energy and Gas Regulatory Authority (VREG).

Although VREG still participates in issuing green energy certificates, the agency is no longer involved in the routine assessment and permitting work related to new solar power projects, thus expediting administrative procedures. This is particularly crucial for Flanders" solar industry, which relies on the distributed sector. According to the Belgian research institution EnergyVille, in 2021, the national rooftop installed capacity reached 99.6GW, with 67.6GW located in Flanders.

Following these changes in the Flanders solar industry, the Belgian government implemented a series of new policies. In February 2021, the government introduced a "social electricity" measure aimed at subsidizing electricity and gas costs for some of Belgium"s most impoverished users. This measure was extended until April 2022. According to the International Energy Agency (IEA) report, the government spent a total of 600 million euros (approx. 651 million USD) to provide electricity to around 765,000 people.

While direct government support for energy projects like this is financially unsustainable in the long run, it aids in accelerating Belgium"s energy transition and other reforms to the energy infrastructure. As part of efforts to decarbonize the national energy structure and support meeting local energy demands, in 2022, the government reduced the value-added tax from 21% to 6% for newly installed photovoltaic modules, thermal panels, solar water heaters, and heat pumps, lowering it by 15 percentage points.

This emphasis on rooftop solar is particularly beneficial in paving the way for a new initiative, with Flanders being the epicenter of this policy reform. From 2022 to 2026, the "Aiding Sustainable Transformation through Effective Energy Renovation for Tenants" (ASTER) plan will drive investments of approximately 155 million euros (about 168.2 million USD) by Flanders" social housing companies into new rooftop solar installation programs, with minimal costs for local residents.