

Portugal Telecom Offers IT Infrastructure for Sale

Portugal Telecom SGPS SA (Portugal Telecom, also known as PT) is a Portugal-based holding company providing telecommunications and information technology services in Portugal, Brazil, Angola, Macao, and Namibia. The company serves more than 100 million business and residential customers worldwide and generates 58 percent of its revenue outside Portugal. The global telecommunications industry is unusually fast-changing and competitive, due to the end of state-owned or monopoly enterprises and the emergence of new services, including mobile phones, the Internet, and digital television.

PT today provides a range of telecommunications and multimedia services, including fixed line and mobile telephone services; television (TV) distribution; Internet Service Provider (ISP) services; and data transmission. These services are delivered primarily over digital networks and are very information technology intensive. Portugal Telecom has been able to leverage its technology expertise to provide information technology (IT) systems and services to other companies of all sizes.

Portugal Telecom's newest data center is in the mountain city of Covilhã, Portugal, where it can take advantage of "free cooling" from Covilhã's often-chilly mountain air 99 percent of the time, thereby reducing energy usage. The Covilhã center opened in September 2013, and combines progressive architecture, sustainability and leading-edge information technology. The entire project, once complete, will feature four block-like data center structures spanning 75,500 square meters, equivalent to about 800,000 square feet. The PT facility is built to have minimum impact on the environment and features a rain water collection system (which forms a moat around the data center building) and a garden with more than 600 trees. Large numbers of solar panels around the facility are an additional source of clean energy.

The center boasts a power usage effectiveness (PUE) rating of just 1.25, compared to an industry average of 1.88, making it among the most energy-efficient data centers in the world. (PUE is a metric for determining the energy efficiency of a data center and is calculated by dividing the total amount of power consumed by a data center by the amount of power used to run the computer infrastructure within it. The closer PUE approaches 1.0, the greater the overall energy efficiency.) When completely built out, the Covilhã data center will be the largest in the country and one of the largest in the world, capable of hosting 56,000 servers. The Covilhã data center is expected to achieve an annual availability of 99.98 percent.

PT management estimates that just one-sixth of the Covilhã data center's eventual capacity will be required for domestic needs. The rest will provide cloud-based applications and services to other countries, including Brazil and African nations, enabling the company to expand its services across the globe. The Covilhã data center and six other domestic data centers run cloud-based information technology services for other companies known as SmartCloudPT. These cloud services include cloud storage and file synchronization services, infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS). Companies who subscribe

to SmartCloudPT pay only for the services they actually use. PT and Oracle are now working on incorporating Oracle software applications into SmartCloudPT. Customers need only to register at the SmartCloud PT Web site and log in to purchase the available services that they need, which are billed in the customers' PT invoice, together with other PT services.

PT claims the benefits of its cloud services include having the information protected in the country's largest data center network, the speed and reliability that customers' businesses need, access to PT's cutting-edge technology, and having certified security, advantages that only PT can provide. And because of its energy savings, PT estimates it can price its services 34 percent lower than the average price for premium data centers in Europe. For PT, green computing is good for business.