

**21ST CENTURY LEAPFROG ECONOMIC STRATEGY:
RIO GRANDE DO SUL BECOMES THE MOST SUSTAINABLE AND INNOVATIVE
PLACE IN LATIN AMERICA BY 2030**

**A Report to the Rio Grande do Sul State Government (AGDI) and the
World Bank, by Global Urban Development (GUD) and Unisinos, applying
GUD's Metropolitan Economic Strategy, Sustainable Innovation, and
Inclusive Prosperity Framework**

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EXECUTIVE SUMMARY

Since November 2011, Global Urban Development has been working with the Rio Grande do Sul (RS) state government and with the Federation of Industries (FIERGS) to apply GUD's Metropolitan Economic Strategy, Sustainable Innovation, and Inclusive Prosperity strategic policy and action framework. For the past year GUD has been collaborating with Unisinos and AGDI to produce a statewide economic strategy for Rio Grande do Sul, with funding provided by the World Bank. This lengthy report represents the fruits of our efforts.

Rio Grande do Sul has been an economic leader in Brazil for a long time. In the 20th century RS became one of the first states to successfully industrialize, and today it remains the third biggest industrial economy among Brazil's states. More than a dozen RS industries are either the largest or second largest in Brazil compared to similar industries in other states.

Yet Rio Grande do Sul is facing considerable economic challenges in the coming decades: relatively slow economic growth, decreasing workforce population, modest productivity improvement, increasing global competition, and insufficient resources to upgrade infrastructure and education, among others.

The alternative to this projected slow growth future is to vigorously promote a much more dynamic, high-growth future, with broad-based employment and income gains. The best way for Rio Grande do Sul to achieve a new level of prosperity and quality of life for Gaúcho families and communities is by becoming the most sustainable and innovative place in Latin America by 2030. We call this approach the 21st century Rio Grande do Sul "Leapfrog" Economic Strategy, because it involves jumping ahead of the present into a more technologically advanced future.

The proposed Leapfrog Economic Strategy for Rio Grande do Sul to become the most sustainable and innovative place in Latin America by 2030 directly addresses five key economic challenges: 1) the Leapfrog Economic Strategy doubles the RS economic growth rate to an average of 4 percent annual per capita GDP growth over 16 years; 2) the Leapfrog Economic Strategy dramatically increases productivity by upgrading skills and technologies; 3) the Leapfrog Economic Strategy expands the working age population by retaining and attracting a more educated and talented workforce; 4) the Leapfrog Economic Strategy strengthens global competitiveness by producing technologically advanced and innovative goods and services that compete more effectively with imports and are in greater demand as exports; 5) the Leapfrog Economic Strategy improves infrastructure and education by attracting substantial international and private sector investments, and by enhancing resource efficiency.

The best part about this strategy is that it makes full use of the traditional strengths of the RS economy, enabling them to grow even stronger. The main engine of

economic growth over the next 16 years will continue to be the massive Food Production Value Chain of Rio Grande do Sul, which represents nearly one-third of the state's economy in terms of agriculture, livestock, food processing, marketing, distribution, and the many closely related business activities in manufacturing and services. Because global food demand will increase 50 percent by 2030, the RS Food Production Value Chain will have even better opportunities to be "the rising tide that lifts all boats."

The central thrust of the RS Leapfrog Economic Strategy will be to become a 21st century leader in Sustainable Innovation by developing, producing, and marketing a very advanced generation of Precision Production, Smart Machines, and Digital Technology, comprehensively applied to agriculture, industry, and services. This approach builds on existing RS assets and strengths in metal-mechanics and electric-electronics, from agricultural machinery/equipment/implements and transportation equipment/motor vehicles/auto parts, to automation and controls. It focuses on higher productivity through new methods of Precision Production, including Precision Agriculture, where Rio Grande do Sul already is becoming an international leader, and Precision Engineering, currently being introduced into RS shipyards constructing heavy-duty offshore oil exploration platforms, vessels, and equipment.

The emphasis on digital technology puts RS businesses ahead of the curve for the innovations of tomorrow, including both hardware and software components of goods, services, and production processes. RS can become more globally competitive in digital software by educating, attracting, and retaining high quality talent, which will facilitate faster economic and technological progress even before major improvements are completed in modern transportation mobility, efficient renewable energy, and broadband telecommunications infrastructure. This strategy maximizes existing RS strengths, even as it builds towards much greater capacity for Gaúchos to develop and use advanced technologies over the next 16 years.

The focus on Sustainable Innovation is vital for the success of the Leapfrog Economic Strategy. The future of the world will be about finding ways for billions of people to live and thrive in peace with each other and in peace with nature. And the good news is that in the 21st century, people, places, and organizations can literally "get richer by becoming greener" – earning and saving more money by conserving and reusing resources much more efficiently.

Many of the major technological advances of the coming decades will involve enabling people to enjoy economic prosperity and quality of life in ways that conserve and reuse natural resources and protect and enhance global ecosystems. The places in the world that Leapfrog into such a future, as some places already are doing, will have a huge economic competitive advantage over the rest of the world. And the first places among emerging economies in developing countries that can accomplish such technological breakthroughs definitely will Leapfrog into the front ranks of global competitiveness. This will happen for two main reasons. First,

because their expertise and experience, reflected in their products and services, will be of enormous value to the rest of the world, as it will be to their own people.

Second, because many global resources will flow to such places from elsewhere: talent, technologies, investors, entrepreneurs, students, scholars, traders, tourists, developers, donors, and much more. The world has a huge interest in supporting places committed to Sustainable Innovation, and this growing interest and the global resources that come with it will increase exponentially during the coming decade.

Rio Grande do Sul now has the opportunity, by committing in 2015 to become the most sustainable and innovative place in Latin America by 2030, to achieve exemplary, high-quality, and broad-based economic growth over the next 16 years. The following report outlines key strategies and features many detailed examples and opportunities. One of the most important of these is Sustainable Innovation Zones.

Sustainable Innovation Zones are a centerpiece of the RS 2030 Leapfrog Economic Strategy. These many special areas in municipalities throughout the state will be among the leading centers for research and development of new innovations and technologies; for promoting entrepreneurial startups and business incubation and acceleration; for experimenting with state-of-the-art methods for improving sustainability and resource efficiency in business and daily life; for enhancing creativity and collaboration; for reducing burdensome rules and regulations and creating a more supportive business-friendly environment; for establishing public-private collaboration in strategic investments and participatory community management; and much more.

Sustainable Innovation Zones in Rio Grande do Sul will be located in mixed-use communities near colleges and universities, technology parks, and technology business incubators, with commerce, housing, and other key amenities and services. They will be magnets for international talent and experiments in 21st century technology.

The goal of the RS Leapfrog Economic Strategy will be to dramatically improve the standard of living for many more people and places in Rio Grande do Sul, generating greater prosperity and quality of life for Gaúchos and enhancing livelihoods and wellbeing for families and communities throughout the state. This goal will be achieved through much more dynamic, rapid, broad-based, and long-term economic growth driven by Sustainable Innovation and Inclusive Prosperity. As the RS Leapfrog Economic Strategy successfully moves forward, jobs and incomes will grow for millions of people, and public and private resources will then expand to enable substantial new investments in cleaner water, more effective sanitation, better housing, and many other vital necessities of infrastructure and transportation, health and education, safety and security, stores and services, for all income levels statewide.

The RS Leapfrog Economic Strategy maximizes everyone's economic contributions by fully utilizing their talents and expertise through productive employment and competitive business opportunities, and by ensuring that such contributions are rewarded with rising incomes and asset ownership. One of the best ways to accelerate economic growth in RS is to develop a highly productive workforce, both by enhancing education, skills training, and advanced technologies for the state's residents and involving them more actively in dynamic economic activities, and by attracting and retaining energetic entrepreneurs and professionals from other states and countries.