



Sustainable Brazil

Social and Economic Impacts of the 2014 World Cup

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Introduction

The Sustainable Brazil series, after five publications that analyze macroeconomic perspectives in the housing, energy, consumer, industrial and agribusiness segments, brings into light another issue that proves to be strategic not only for its wealth creation and multiplication capacity but also for the event's importance and magnitude: the 2014 World Cup.

On October 30, 2007, the FIFA Executive Committee appointed Brazil as host of the tournament. With this, the country will be the fifth to host the World Cup twice, after Mexico, Italy, France and Germany. However, the event's profile has changed significantly since the 1950 World Cup. In 2014, we will have a large-sized tournament that will require extensive preparation processes and complex operations to be implemented. On the one hand, the World Cup will bring impacts and benefits - whether temporary or long-lasting, whether direct or indirect - to different economic and social segments. On the other hand, it also presents several risks, requiring effective management processes in the public and private sectors for the full flow of benefits to society.

Accordingly, this study has seven objectives, in addition to its unprecedented aspects:

- ▶ **Estimate the social and economic impacts of the 2014 World Cup on Brazil;**
- ▶ **Establish metrics and indicators for implementation of the first sustainable World Cup;**
- ▶ **Indicate the impact of investments on regional GDPs for each host city;**
- ▶ **Understand the impacts of the event on sector GDPs of more than 30 macro and microeconomic segments;**
- ▶ **Detail the management processes for the successful outcome of a major event;**
- ▶ **Outline and assess the risks and gaps to achieve of positive impacts and minimize negative impacts;**
- ▶ **Show opportunities and initiatives that increase and perpetuate the benefits of this event for the Brazilian society.**

This study results from an association of Ernst & Young Terco and the Fundação Getulio Vargas (FGV), and seeks to shed light on a new scenario emerging in the country with the World Cup which could result in a number of opportunities for growth if adequately addressed by the public and private sectors.

The different extents of the socioeconomic impacts - for the well-being of the Brazilian population - will be perceived as a result of several aspects. These will depend on the country's ability: to obtain the necessary investments and perform actions in time for a successful event; to capitalize on the Cup's legacies, turning them into permanent assets; and, finally, to reach these objectives in an economically effective manner, avoiding excessive disbursements and poor allocation of resources or opportunity costs.

The idea is that Brazil gets organized in such a way that the event lasts not only a few days, but for many years, leaving a positive legacy for society as a whole. More important than just responding to outside expectations for the World Cup is the creation of an internal environment that allows the infrastructure works and the impacts on the macro and microeconomy to improve the life of Brazilian people.

In order to capture all these "multiplier effects", this study developed an Extended Input-Output model based on the Input-Output Table of the Brazilian Geography and Statistics Institute (Portuguese acronym - IBGE).

This model represents the Brazilian economy by means of 55 economic activities, 110 product categories and 10 income/spending profiles for the population, and allows to estimate the total (direct, indirect and induced) impacts of World Cup-related activities on domestic output, employment, income, spending and tax collection.

The forecasts used in this survey were driven, to the extent possible, by comparable experiences and by the financial planning of public bodies. The impacts were measured according to specific criteria, such as the difference in expenditures considering scenarios that include and exclude the World Cup. In addition, the costs of all operations and acquisitions were regarded as stable so as to allow them to be summed at any time until 2014, without the use of intertemporal discount rates. Possible fluctuations or trends in the macroeconomic landscape were not taken into consideration.

Social and economic impacts

Economy will produce an additional R\$ 142 billion

The benchmark scenario used in this study indicates that the 2014 World Cup will produce a surprising cascading effect on investments made in the country. The economy will snowball, increasing by five times the total amount invested directly in event-related activities and impacting various industries. In addition to the R\$ 22.46 billion spent by Brazil on the World Cup to ensure an adequate infrastructure and organization (see box on this page), the tournament will bring an additional R\$112.79 billion to the Brazilian economy, with indirect and induced effects being produced thereafter. In total, an additional R\$ 142.39 billion will flow in the country from 2010 to 2014, generating 3.63 million jobs/year and R\$ 63.48 billion of income for the population, which will inevitably impact the domestic consumer market, as shown in the table on page 6.

This production will also result in an additional tax collection of R\$ 18.13 billion by the local, state and federal governments. The World

Cup's direct impact on the Brazilian Gross Domestic Product (GDP) is estimated at R\$ 64.5 billion for the period 2010-2014 - an amount equivalent to 2.17% of estimated GDP for 2010, namely R\$ 2.9 trillion. As the World Cup is a one-time event, most of its systematic

impacts will not be permanent. In fact, once the investments have been concluded and the World Cup has taken place, the positive impacts will remain based on the stakeholders' ability to benefit from the event's opportunities and legacies. Therefore, the evaluation

Consolidated impacts of the 2014 World Cup

a) Impact on final demand (World Cup-related expenditures in Brazil)	R\$ 29.60 billion
▶ Investments	R\$ 22.46 billion
▶ Operating expenses	R\$ 1.18 billion
▶ Visitors' expenses	R\$ 5.94 billion
b) Impact on national production of goods and services	R\$ 112.79 billion
c) Impact on income (generated by item a)	R\$ 63.48 billion
d) Impact on employment (jobs/year - generated by item a)	3.63 million
e) Impact on tax collection	R\$ 18.13 billion

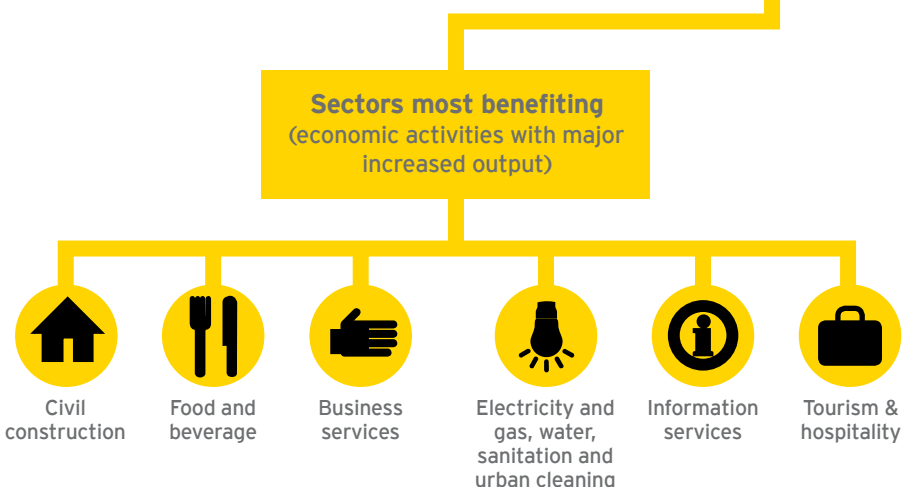


Table 1

in the first part of this study is limited to the period 2010-2014.

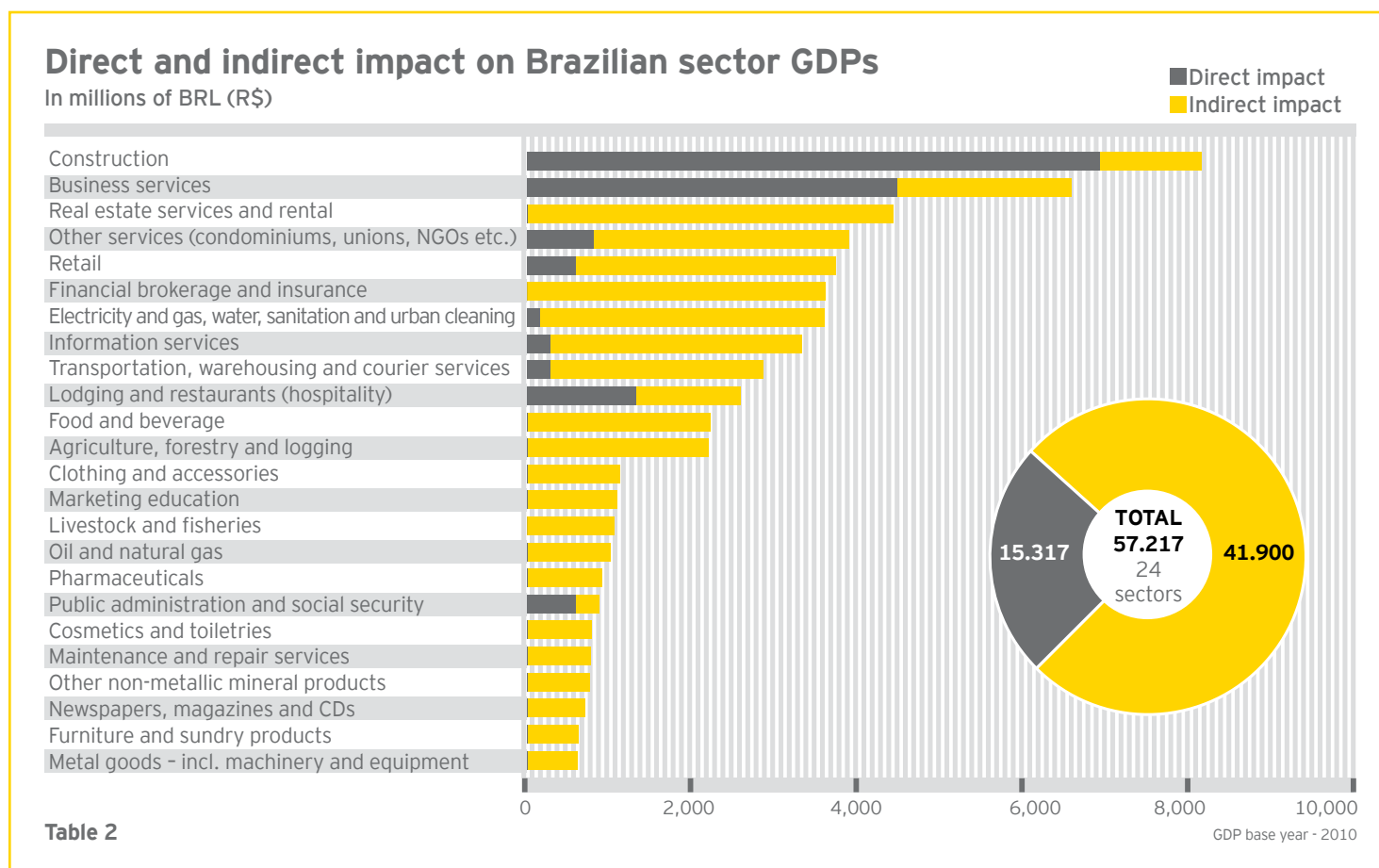
Thus, the job creation estimated by the study primarily refers to temporary jobs only. The estimated 3.63 million jobs/year correspond, as far as compensation is concerned, to 3.63 million positions to be held for one year. The exact distribution of this number of jobs/year over the period 2010-

2014 will depend on an accurate schedule of implementation of construction work and efforts.

The sectors mostly benefiting from the World Cup will be construction, food and beverage, business services, utilities (electricity, gas, water, sanitation and urban cleaning) and information services. Together, all these areas will increase output

by R\$ 50.18 billion.

Second to none on the list of benefiting segments, civil construction will generate an additional R\$ 8.14 billion in the period 2010-2014. Total output from this segment for 2010 is estimated at R\$ 144.6 billion. Other economic segments that will take advantage of the World Cup are, for example, business services and real estate services and rental,



The Cup should generate 3.63 million jobs/year and R\$ 63.48 billion income for the population in the period 2010-2014, besides an additional R\$ 18.13 billion in tax collections.

with the former generating an additional R\$ 6.5 billion and the latter an additional R\$ 4.4 billion over the period.

Of the total R\$ 29.6 billion in estimated costs relating to the World Cup (including visitors' expenses), R\$ 12.5 billion will originate in the public (government) sector (42%) and R\$ 17.16 billion will derive from the private sector (58%).

Changes throughout history

Brazil has experienced many changes since the first time it hosted the World Cup in 1950. The size of the event was unquestionably different. At that time, the tournament had 13 teams playing 22 games in six arenas, with an estimated 1.04 million audience.

The 2006 event, held in Germany, had 32 teams playing 64 matches in 12 stadiums, and attracted 3.35 million viewers, having generated 18 million visits to the Fan Parks (large areas of free public entertainment and recreation that did not exist in the 1950s)

and an estimated 26.29 billion TV viewing audience.

The 2014 World Cup is likely to have an even greater audience and viewers, but will follow similar structural and organization standards to those adopted by Germany and by South Africa in 2010. Additionally, this is not an isolated event, being preceded and accompanied by many others, mainly the Confederations Cup, held one year earlier.

The Confederations Cup is the first major event to be held in Brazil just before the World Cup and will therefore be a litmus test to check if all preparations are running on schedule and following the specs defined by the International Football Federation (Fifa).

This significant event - although not as important as the World Cup - brings eight teams playing 16 games in 16 to 22 days. The tournament attracts a smaller audience, consistent with its advertising efforts and historical importance. The flow of international tourists to this tournament, for instance, is expected to be less than one quarter of that expected at the World Cup.

Many of the structures required for the World Cup should be ready for the Confederations Cup, when tests will be run for the arenas, the various International Media Centers (IMC) and the International Broadcasting Center (IBC). The hospitality and transportation infrastructure should be almost completed by then.

For the World Cup mega event to take place, the country will have to take giant steps, despite the tight schedule for completion of already planned construction work - as will be seen in this study.

The positive effects of hosting one of the world's major sports events may last forever and multiply, as we will see. Once all the steps and requirements established by Fifa are complied with, and Brazil builds up its image as a country that can seriously organize an international tournament, we will be reaching another socioeconomic and structural level. After going through some stages and achieving solid macroeconomic core principles, the country approaches its desired status of being the world's fifth largest economy in the very near future.

Tourist inflow boosts spending

One of the aspects that most attract a country to host a World Cup is the tourist inflow generated by such an event- not only directly, with fans who will watch the games, but also indirectly, as a result of the international media exposure.

However, this opportunity for growth in the tourism industry should be exploited through various lines of action, among which the most important in Brazil is removing bottlenecks. Regarding this specific issue, we must bear in mind that, except for isolated initiatives, the growing visibility of the country on the international scene over the last decade has not been adequately leveraged by the private and public sectors to fully exploit the potential of Brazilian tourism. This fact is evident in the declining quality of airports, as well as the stagnant number of tourists in recent years.

This study indicates that, once the actions that are required to enable the country to capitalize on the opportunities generated

by the World Cup are completed, the event may result in an increase of up to 79% in the international tourist inflow to Brazil in 2014, with even possibly higher impacts in subsequent years. In the period 2010-2014, that figure should be as high as 2.98 million additional visitors.

Tourist inflow entails a significant inflow of funds, notably to the hospitality, transportation, communications, culture, entertainment and retail industries. The tourist inflow directly and indirectly induced by the World Cup is expected to account for additional income up to R\$ 5.94 billion for Brazilian companies.

Visitors' spending

In millions of BRL (R\$)

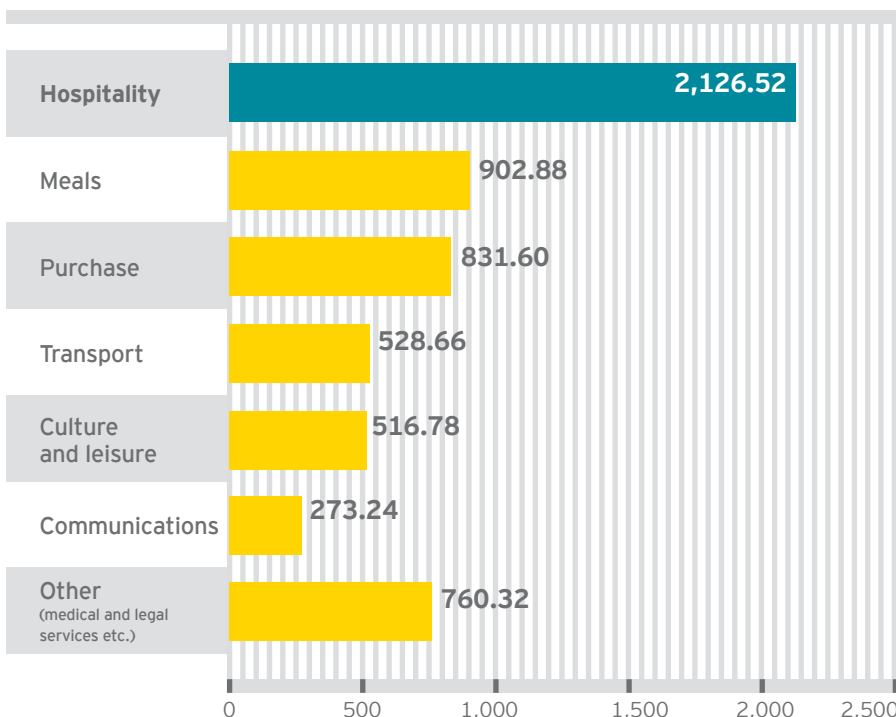


Table 3

**R\$ 14.54 billion investments
in host cities should impact their
local GDP by R\$ 7.18 billion.**

Host cities: the various hearts of the World Cup

There is great anticipation about the adequate preparation of the host cities for the event. Many have wondered whether they will be fully compliant with the requirements imposed by Fifa when it comes to the infrastructure of stadiums, urban mobility, hospitality and safety, especially. These aspects will be the basis for the success of the 2014 World Cup and its legacy not only from the standpoint of the event itself but also of regional tourism conditions.

As for the number of stadiums and participating cities, the Cup will have 12 host cities distributed among the five greater geographical regions of the country, which differ significantly in terms of infrastructure, capacity and adequacy of stadiums and geographical features.

In this context, the matches with higher expected audience - such as the opening match and those played at the second stage - must

be received by the host cities with larger-capacity stadiums and better general conditions.

These cities will be targeted with infrastructure initiatives that will add up to total investments of R\$ 14.54 billion (see investment map for each host city and the related impact on city GDPs on pages 14 and 15). On reurbanization and beautification alone, focusing on locations with greater tourist inflow and the immediate area around the stadiums, expenses are estimated at R\$ 2.84 billion. The structure required for holding the World Cup and associated events is far-reaching, including not only the stadiums, which must meet the specifications defined by Fifa, but also the information technology base in each host city, the media centers (IMC) and the match broadcasting center (IBC), as well as the facilities of the Fan Parks. But that's not all. There are also several other aspects regarding local infrastructure that must satisfy some criteria for the event to be feasible, including hotel compounds and access to the various means of transportation that can serve the intense movement of people associated with the Cup.

Domino effect

Direct and indirect socioeconomic impacts

The scenario of impacts arising from the World Cup does not result from individual factors, but from a set of interconnected aspects. The domino effect of direct actions can be clearly seen as a series of economic, social and cultural developments - some of which, if well used, can be made part of a society on a long-term basis. For better clarification and for the purposes of this study, three sets of actions or activities relating to the World Cup were analyzed:

- ▶ **Investments:** capital formation activities aimed at the World Cup, including those which would be performed in any case but with smaller financial contributions and projects or over a longer period of time, e.g. construction or renovation of stadiums, expansion of the hotel compound, investments in transportation infrastructure etc.;
- ▶ **Operation of the event:** preparation and management, by the Local Organizing Committee (LOC), of the event, of the specific committees in the host

cities (with investments still to be defined) and of the security teams in charge; and

- ▶ **Spending by visitors:** purchase of goods and services by tourists directly or indirectly attracted by the World Cup.

These three groups of activities represent a source of demand for goods and services and thus positively affect the economic sectors that should meet this demand. These benefits - increased production, employment, income and tax collection - are construed as direct impacts in this context. For example, building a stadium represents increased production by the construction sector, and this increase is reflected in hiring personnel and subsequent distribution of income - derived from production - to employees, shareholders and governments.

However, the impacts of actions associated with the World Cup extend further. This is due to the interconnected nature of the economy: for an entity to produce, inputs (whether tangible goods, such as equipment or building materials, or services, such as electricity, insurance etc.) must be obtained from other sectors. This is the so-called intermediate

spending. Thus, the production increase in those sectors directly related to the World Cup requires them to consume a larger amount of inputs (e.g. the construction industry will require more beams, produced by the steel industry).

The producers of these inputs, in turn, must increase their own intermediate spending (steel manufacturers need to consume more electricity), and so on. It can be noted therefore that the World Cup generates a long chain of economic consequences, which are referred to collectively as indirect impacts.

Income effect - There is another similar channel of interconnections among sectors that generates a chain of impacts that takes after and is linked to the first chain. That is the household spending: compensation paid to employees and shareholders in each sector translates, in full or in part, into the acquisition of goods and services, so that an increase in production causes an increase in consumption of such goods and services. For example, the wages of a worker involved in building a stadium can contribute to the purchase of a new car, representing an increased demand for the automotive industry and so on.

The domino effect of direct actions can be clearly seen as a series of economic, social and cultural developments.

The set of consequences generated by the household spending channel is referred to as induced impact, or income effect.

In order to capture all these “multiplier effects”, this study, a joint effort by Ernst & Young Terco and FGV, developed an Extended Input-Output model based on the Input-Output Table of the Brazilian Geography and Statistics Institute (Portuguese acronym- IBGE). This model represents the Brazilian economy by means of 55 economic activities, 110 product categories and 10 income/spending profiles for the population, and allows to estimate the total (direct, indirect and induced) impacts of World Cup-related activities on domestic output, employment, income, spending and tax collection.

The input-output analysis plays an important role in a more general framework. It allows estimating the systematic socioeconomic impacts of a well defined set of activities and actions, considering that such activities will be conducted under assumed parameters.

Thus, it should include other aspects: an assessment of conditions for the successful completion of the event, for

capitalizing on legacies, and for the economic efficiency of activities, minimizing, to the extent possible, the opportunity costs, and excess, unnecessary or misdirected expenditures, which will be analyzed in the second part of the study.

Once the three types of World Cup - related actions have been defined as well as their related impacts, classified as direct, indirect and induced impacts, we will now detail them and estimate them in numbers.

Direct impacts in numbers

The period of preparation for the World Cup involves, as already mentioned, a series of investments in infrastructure projects, construction and building works, human capital formation, capital expenditures and media and advertising. Part of these investments will be supported by the government and part will be funded by the private sector and institutions associated with the World Cup.

This study reviewed the following types of investments:

► **Building and renovation of sports stadiums:** various host cities do not have stadiums capable of holding international competition matches. Even those stadiums that are among Brazil's most suitable do not currently meet all accessibility, safety, comfort, lighting, structure and services requirements defined by Fifa. In Natal, Recife and Salvador new stadiums will be built. Stadiums in the other host cities will be renovated for purposes of adapting to the requirements. This item represents the main individual cost component of the 2014 World Cup, amounting to R\$ 4.62 billion. The proposed works are extensive and may cost the host cities the opportunity to host some matches if they are not performed in accordance with Fifa's requirements.

► **Expansion and adequacy of the hotel complex:** the World Cup will generate an increasing demand for hotel complexes of the host cities, not only due to the event itself, but also to the hike in tourist inflow caused by the country's increased international exposure as a tourist destination. However, of all the host cities, only Rio de Janeiro, São Paulo and Curitiba are better prepared to meet this

demand. In the other cities, the expected number of tourists exceeds their current hosting capacity, resulting in a total projected deficit of 62,397 hotel rooms. The challenge to overcome this deficit will require the industry to expand and adjust its capacity, which will demand significant investments.

Projected investments, totaling some R\$ 3.16 billion, will add 19,493 new housing units to the hotel complex of the host cities. Note that this projection is not sufficient to fully meet the demand, indicating that alternative types of accommodation will likely be used, such as seasonal rental of property, accommodation in neighboring towns, or even the use of idling cruise ships, as the case was with the 2004 Olympic Games in Athens.

► **Investments in media and advertising:** similarly to previous Cups, the 2014 World Cup will result in a large appreciation of media space (including television, radio, internet, physical space and others). For instance, the World Cup in Germany boasted a 5.1% growth in sales by the country's advertising industry in 2006. Similarly, investments

in media are estimated at some R\$ 6.51 billion on account of the event in Brazil, conducted mainly by the private sector and mostly concentrated in the year 2014.

► **Investments in information technology:** in 32 days, the 2006 World Cup in Germany generated the production and traffic of about 15 terabytes of data, equivalent to 100 million books. This traffic has demanded the implementation and operation of an extensive IT infrastructure with the participation of over 1,000 professionals. The increased participation of professional media and connectivity of amateur users, as well as the continuous increase in digital image and video format solutions, are indicators that the 2014 World Cup will further boost these figures. It is estimated that investments of R\$ 309 million will be required to accommodate the large flow of data and processing capacity associated with the event.

► **Implementation of media and broadcasting centers (IMCs and IBC):** international broadcasting and media centers are essential for the running of the World Cup. International Media Centers (IMCs) are located

Investments in media and advertising, totaling some R\$ 6.51 billion, are made primarily by the private sector and mostly concentrated in 2014.

World Cup investments

In millions of BRL (R\$)

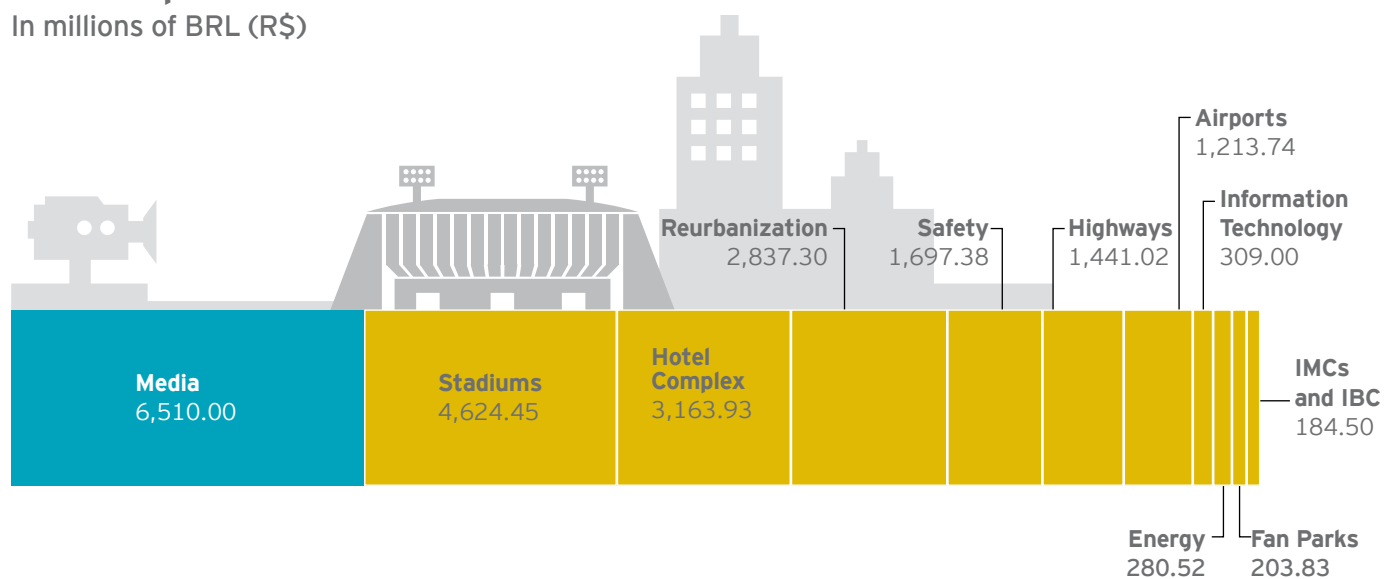


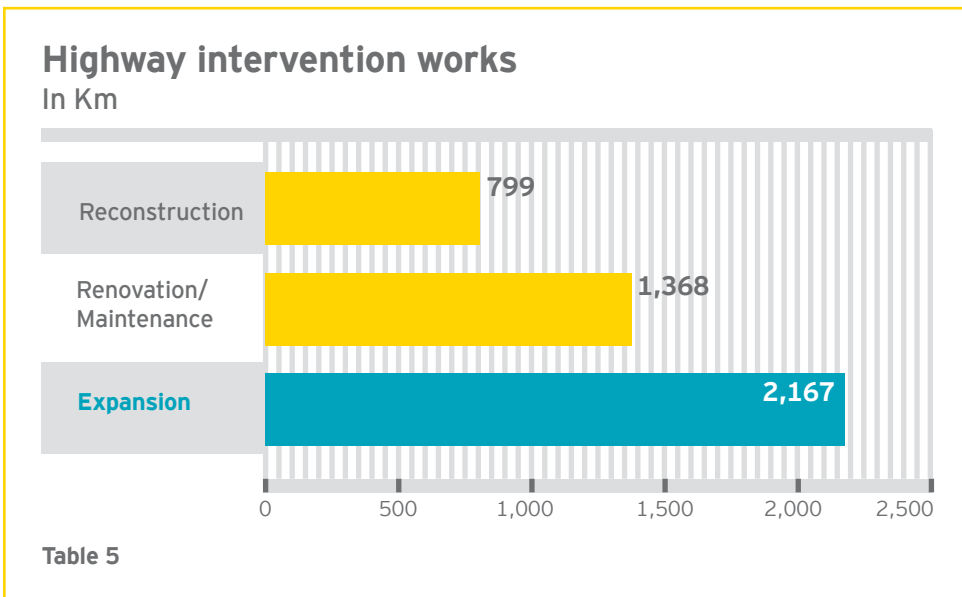
Table 4

in each host city and transmit information on events to the International Broadcast Center (IBC). This operates as a core center from which information is sent to other countries. The IBC is a much more complex center than the various IMCs and requires its own specific place to operate, whereas the IMCs may be located inside the stadiums that will host the matches. The IBC implementation will require investments of R\$ 184 million. The implementation costs of IMCs, however, are included in the stadium adaptation projects.

► **Public investments in transport infrastructure:** the long distance between Brazilian cities and the expected increase in tourist inflow will force the public sector to invest in the expansion of airport capacity and in the maintenance or renovation of highways. Throughout June and July 2014, the World Cup will generate an additional flow of 2.25 million passengers at Brazilian airports. This flow corresponds to 11.8% of an average monthly demand on the aviation system in 2009. To meet this increased demand,

investments of R\$ 1.21 billion will be made. In addition, it will be necessary to intervene in 4,334 km of highways, including reconstruction, maintenance and expansion works. These works will require R\$ 1.44 billion in addition to the investments already planned without the Cup.

► **Reurbanization of cities:** as in previous competitions, the 2014 World Cup will represent an opportunity to revitalize the tourist areas of the host cities (totaling 379 km²), the surroundings of their airports



1.70 billion will be required in security infrastructure (vehicles and aircraft, communications and technology systems), training, weaponry and other essential expenditures.

► **Setting up of Fan Parks, large parks or outdoor areas turned into recreational and public integration facilities:** introduced at the World Cup in Germany, these parks will be set up in 12 host cities, featuring entertainment activities, sale of food and drinks, parties, big screens to broadcast live matches and stages for concerts between matches. With free admission, the 2006 Fan Parks had many visitors, busy schedule and excellent response from the participants. At the German Cup, while the attendance figures reached 3.4 million people, the Fan Parks attracted 18 million visitors. Investments to establish Fan Parks are estimated at R\$ 204 million, including physical infrastructure, cleaning, security and other services, in addition to entertainment activities.

(132 km²) and their stadiums (0.6 km²). These locations will be targeted with initiatives such as: street lighting; paving of sidewalks and roads; renovation of street furniture; adaptation of urban spaces to meet the needs of persons with disabilities; construction of recreational areas; and embellishment in general. In total, these initiatives represent an estimated investment of R\$ 2.84 billion.

► **Investments public security:** in an event of major proportions and visibility as the World Cup, ensuring safety is essential.

Although some candidate cities face challenges involving urban violence, the lessons learned from the 1992 Earth Summit and the Rio 2007 Pan American Games shows that this objective can be fully achieved, provided that the necessary investments are made. Recent experience shows that spending on training and equipment tends to reduce the response time of police action and contributes to reducing violence even after the competition, an important legacy of the event. To ensure a tournament with a high level of security, investments of R\$

To revitalize the host cities tourism areas as well the surrounding airport and stadium areas, investments of R\$ 2.84 billion will be required.

Expenses on the operation of the event In millions of BRL (R\$)

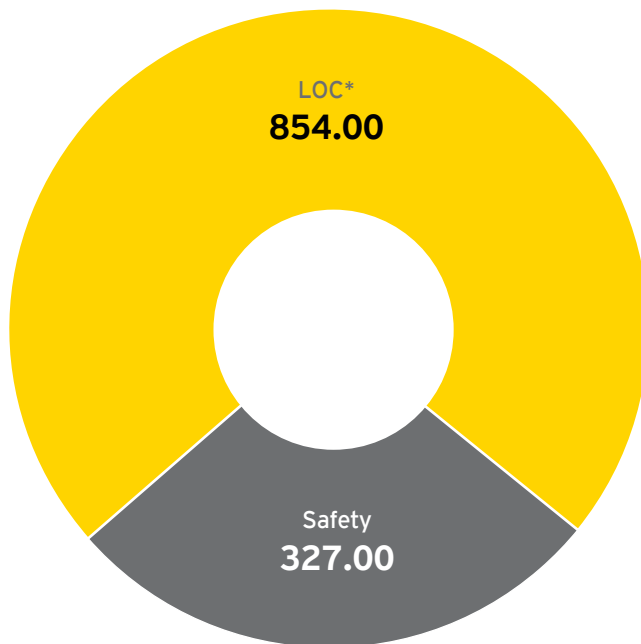


Table 6

*Local Organizing Committee

entirely the responsibility of Fifa and will be R\$ 854 million.

► **Security operations:** these refer to the costing of the actual number of police officers - up to 78,000 people - required to carry out security operations for the event in the host cities. It is estimated that the cost of this security force (including payroll, travel costs and other variables) will total R\$ 327 million.

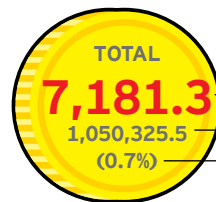
► **Electrical redundancy operation:** in order to ensure the quality of the event, Fifa imposes a number of requirements regarding the infrastructure of venue cities and of facilities selected to stage World Cup events. As regards electrical infrastructure, the main item refers to the need for electrical redundancy between cities. It can be noted, for example, that the host city of Manaus has no redundant transmission lines. It is assumed that this city operates the existing thermal power plants using the new transmission line as a backup. The operating cost of these thermal plants in Manaus is estimated at R\$ 280 million.

The core actions of the operation

For the event to actually occur under the standards required by Fifa, an organizing committee is formed and accountable for overseeing and ensuring compliance with the construction work schedule. The three major core actions of the event are as follows:

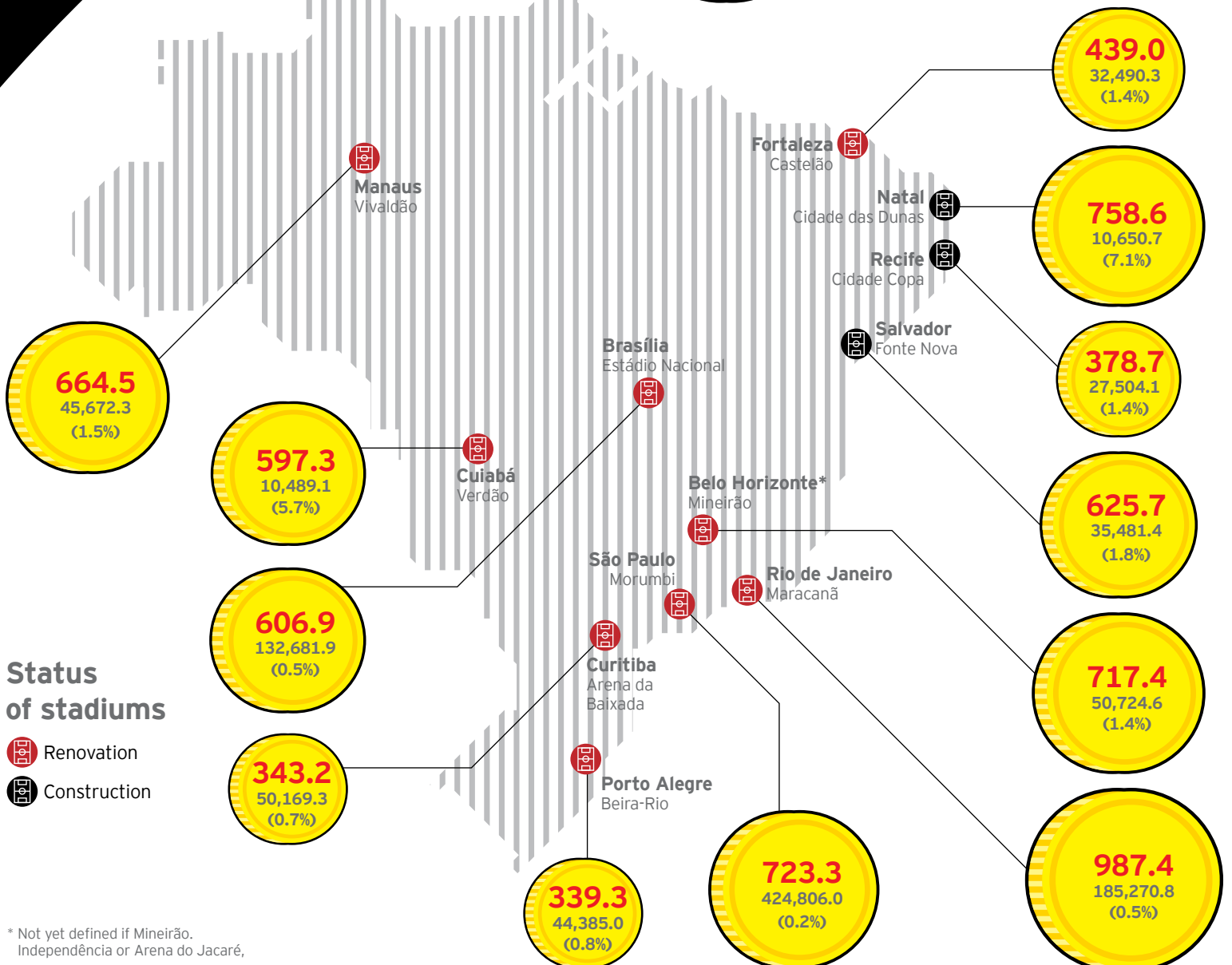
► **Operations of the Local Organizing Committee:** the LOC is responsible for managing the tournament's organization and for covering its operating costs. These expenses include travel costs of the teams, delegations and officials; committee's personnel costs and management fees; advertising and other expenses. The funds required to cover all these expenses are

The map of INVESTMENTS AND THEIR



In millions of BRL (R\$)

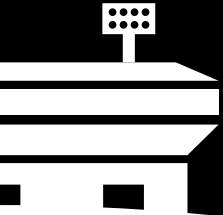
- Impact on GDP**
- City 2010 GDP
- Direct Impact (% of 2010 GDP)



Status of stadiums

- Renovation
- Construction

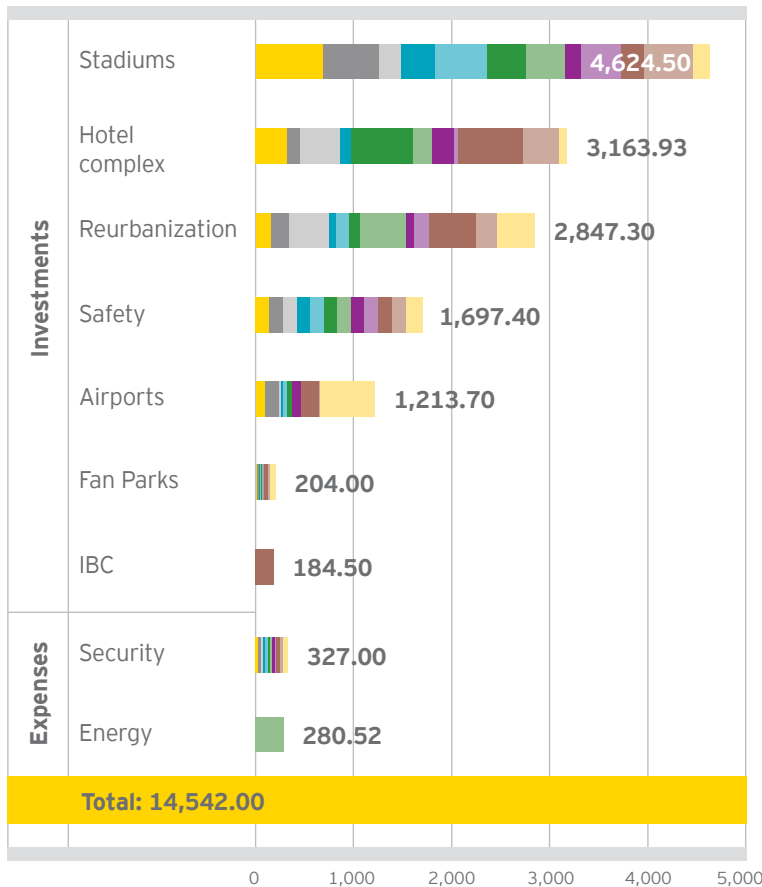
* Not yet defined if Mineirão, Independência or Arena do Jacaré,



IMPACTS ON REGIONAL GDPs

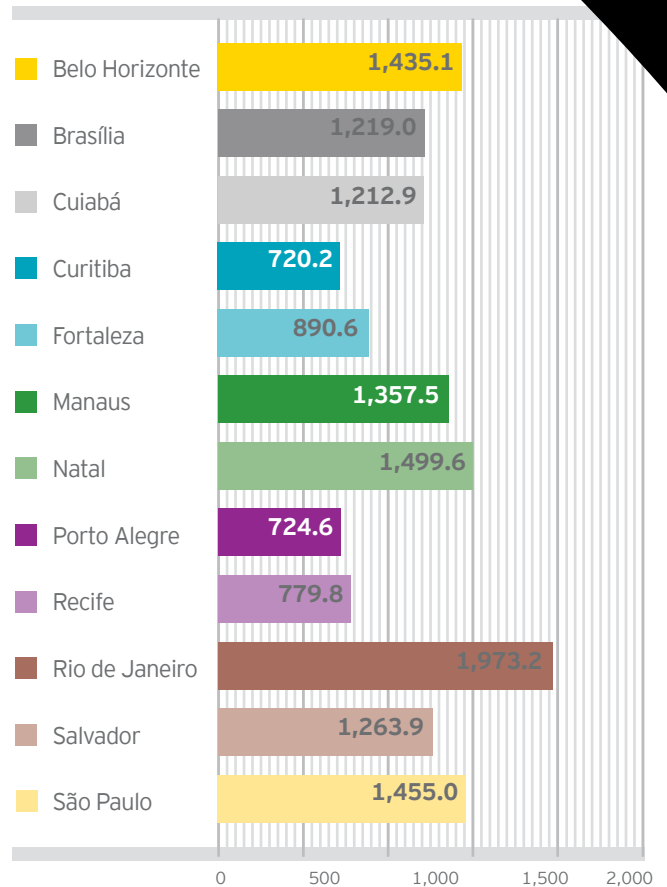
Allocation of investments

In millions of BRL (R\$)



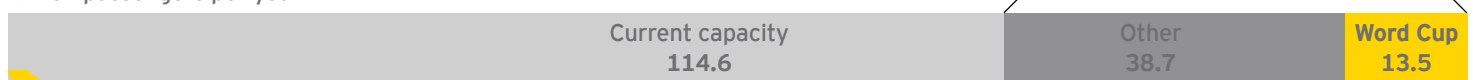
Rio with more funds

In millions of BRL (R\$)



Higher airport activity

Million passengers per year



Sustainable World Cup

Social-environmental responsibility at stake

The analysis of socioeconomic impacts cannot be dissociated from the environment in a mega event such as the World Cup, which often serves as a mirror for future actions. Ensuring performance for sustainable development in this type of global tournament means contributing to a decrease in social and environmental costs, and in inefficiencies and waste, as well as contributing to a greater social integration and to the continued development of individuals, communities and relationships between the society and the environment.

According to the criteria adopted by the United Nations Environment Program (UNEP), the economic, social and environmental dimensions must be integrated to meet the challenges of six priority areas: climate change, disasters and conflicts, ecosystem management, environmental governance, harmful substances and efficient use of natural resources.

An event such as the World Cup, which has the provision of services as one of its central pillars, cannot ignore its responsibilities in relation to these issues.

The socio-environmental aspect permeates all of its activities. For example, in directly performing or subcontracting services, it is important to identify criteria that ensure workers' health and safety, working conditions, payment of rights and benefits, quality of life, strengthened learning systems as well as post-event employment and sustainability.

In relation to the public, it is essential to ensure urban quality, accessibility, security, access to information, environmental education and usefulness of facilities, as well as urban interventions after the event. The government agencies and private entities involved with the World Cup should be required to ensure the responsible use of natural and economic resources, and responsible sourcing of acquired raw materials, products and services. The goal is to reduce carbon dioxide (CO₂) emissions from burning fossil fuels, as this is one of the major causes of the greenhouse effect.

Carbon footprint - Since the German World Cup, Fifa has been developing "The Green Goal", an official program aimed, among other aspects, at reducing CO₂ emissions. It focuses on four aspects: water, waste, energy and transport. The carbon footprint of the 2010 World Cup is estimated at 896,661 tonnes of carbon, with an additional 1,856,589 tonnes contributed by air transport, as shown in the table on the opposite page. The carbon footprint measures how much carbon dioxide is produced by all activities (transport, electricity, etc.) carried out by an individual, a company, an event - these activities normally use fossil fuels such as oil, gas and coal.

The term 'carbon footprint' refers to another expression, 'ecological footprint', which indicates the amount of natural resources required to support a given population. The carbon footprint of the 2010 World Cup in South Africa should be eight times larger than in the 2006 World Cup in Germany, excluding air travel.

As shown in the table 7, international travel by plane corresponds to 67% of the carbon

The socio-environmental aspect permeates all of the World Cup-related activities, from stadiums built based on the “green building” criteria to the impact of air travel on determining the “carbon footprint”.

Summary carbon footprint for the 2010 World Cup

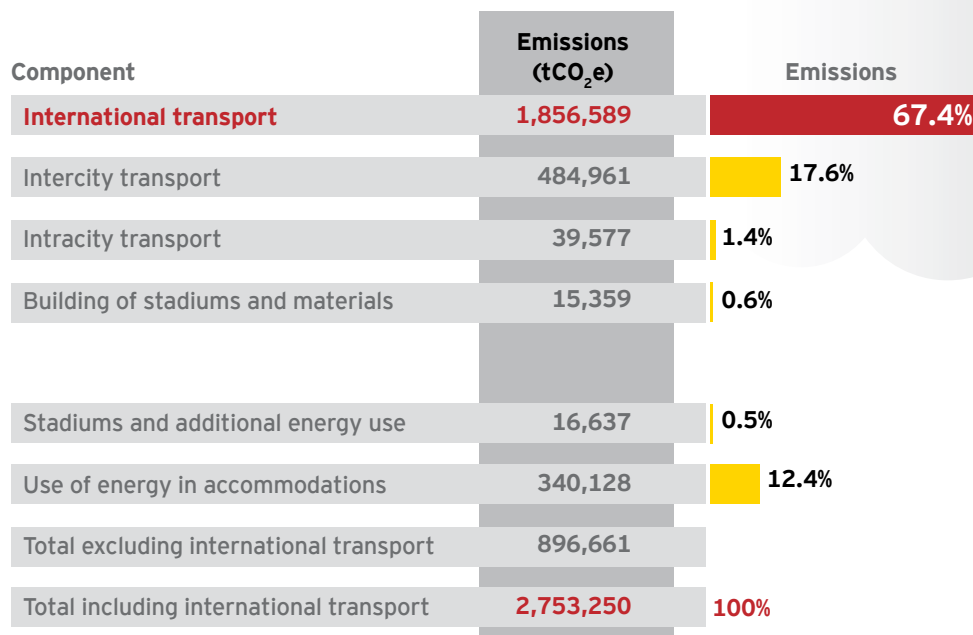


Table 7

footprint, since most visitors should use this means of transport to arrive in South Africa. Based on Brazil’s location and its continental size, CO₂ emissions will certainly compare to these results in the 2014 World Cup.

The performance measurement for the sustainable development of a country, state, city or community requires the definition of a set of indicators that should be proposed in accordance with pre-selected and defined performance criteria, based on compliance with socio

- environmental responsibility. Performance indicators can be defined as benchmarks or values derived from benchmarks based on standards designed to meet an environmental and social responsibility program. The standards consist of principles, criteria, targets, indicators and verifiers.

The standard to be established by states and organizations involved in implementing the 2014 World Cup can be based on the scope of environmental and social

responsibility of states and areas defined as priorities by Fifa for the German Cup. The following is the first attempt of a preliminary set of quantitative indicators identified in accordance with predetermined standards of environmental responsibility of the priority states and areas of the Green Goal, considering the Brazilian reality. This set of indicators should be evaluated and tested according to the dynamics of each state and/or organization.

SEVEN STEPS TO THE GREEN CUP

1 Energy conservation and climate change

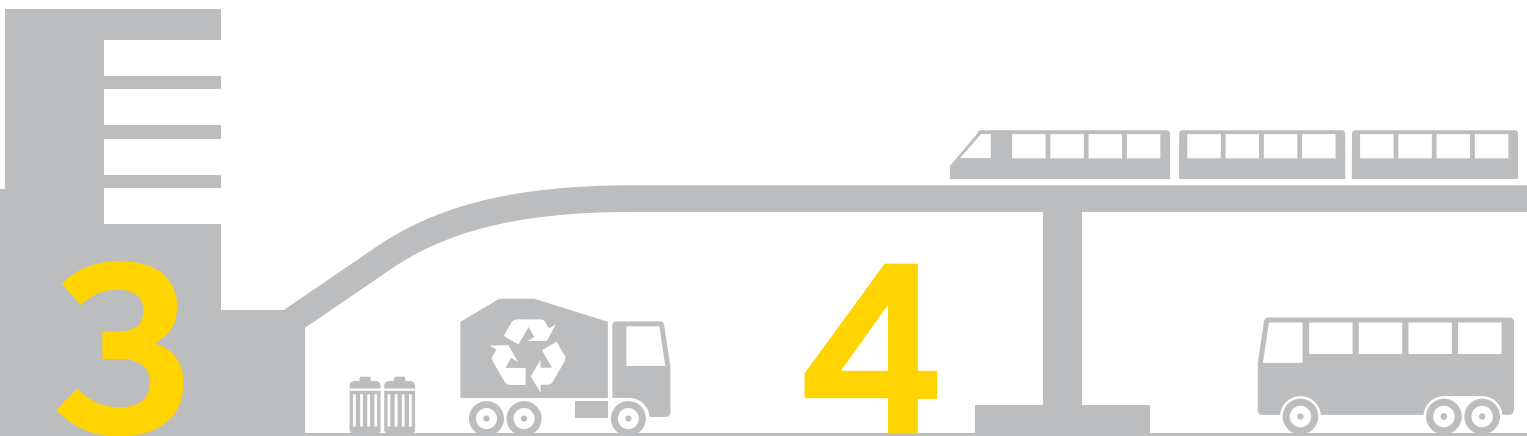
PRINCIPLE: How to minimize the carbon footprint

Water

PRINCIPLE: How to promote water conservation through reduced use

CRITERIA	INDICATORS
Calculation of the carbon footprint for the 2010 Cup.	Amount of carbon dioxide generated.
Implementation of carbon offsetting.	Measurement of reduction in CO ₂ emissions.
Energy efficient technologies.	Measurement of energy reduced in one year.

CRITERIA	INDICATORS
Technologies for water reuse in several environments: stadiums, quarters, hotels and tourist locations.	Measurement of water saved.
Alternative sources to meet irrigation needs.	Measurement of water saved.



Integrated waste management

PRINCIPLE: How to reduce, reuse and recycle waste supported by landfill scavengers, including them in the management process

Transport, mobility and access

PRINCIPLE: How to attain energy efficiency, using universal accessible means of transport that minimize pollution

CRITERIA	INDICATORS
Selective waste collection program at stadiums, quarters etc.	Measurement of waste for selective collection per class and type of waste.
Environmental education program focused on selective collection.	Number of people trained to be multipliers.
Master plan on solid waste including landfill scavengers should be prepared.	Number of people covered by the environmental education program.
	Number of landfill scavengers included in the process.
	Number of processing facilities set up under shared management with landfill scavengers associations.
	Share of recyclable waste allocated to landfill scavengers in relation to total waste.
Plan on landfill scavengers' sustainability after the World Cup.	Number of landfill scavengers and organizations covered by the plan.
	Number and type of training offered to landfill scavengers.
	Number of associations/ cooperatives that could implement a business plan.

CRITERIA	INDICATORS
Infrastructure for cyclists and pedestrians.	Km of bike paths built.
	Number of bike path users.
Public transport with reduced pollutant emissions.	Type of public transport implemented.
	Assessment of vehicle black smoke.
	Amount equivalent to reduced carbon.
Eco-taxis.	Number of eco-taxis in the urban fleet.
	Amount equivalent to reduced carbon.



5

6

Landscape and biodiversity

PRINCIPLE: How to preserve biodiversity by promoting natural landscape

Green buildings and sustainable lifestyles

PRINCIPLE: How to promote awareness and sustainable lifestyle

CRITERIA	INDICATORS
Landscape training to promote natural landscapes.	Number of employees trained.
	Type of training offered.
	Number of hours invested in training.
Biodiversity showcases.	Number of showcases implemented.
	Public access to showcases.
Students contest for the garden around the soccer field.	Number of registered participants per age group.
	Number of projects implemented.
	Number of projects sustained one year after implementation.
Environmental education program focused on city embellishment.	Number of planted trees and community embellishment efforts.
	Number of course materials produced.

CRITERIA	INDICATORS
Ecological park and smart living center.	Number of ecological parks implemented.
	Area (in square meters or hectares).
	Number of parks that survived for one year.
Environmental Education Campaign (EEC).	Positive evaluation of ECC quality and effectiveness (more than 50% of users).
	Number of course materials produced.
	Number of people covered.
	Number of people trained as multipliers.



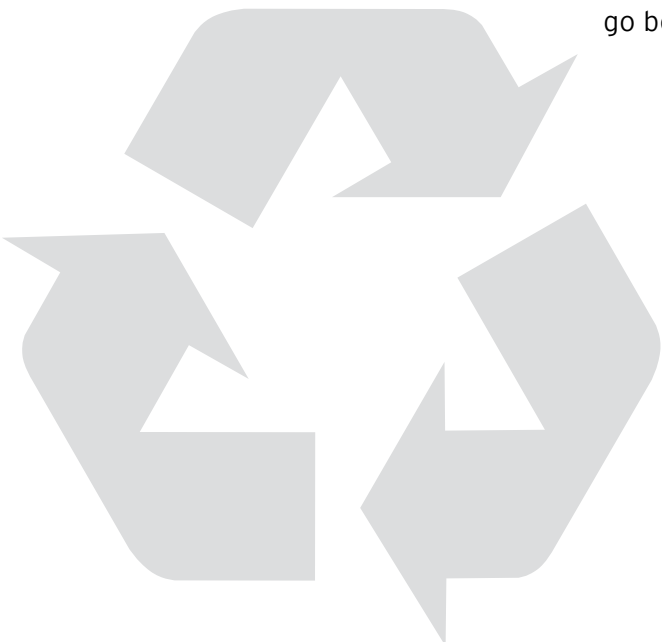
CRITERIA	INDICATORS AND VERIFIERS
<p>Internationally recognized Certification for projects and construction of sustainable stadiums and quarters (Leed, Acqua, Breeam etc.).</p>	<p>Amount of reduced CO₂ emissions - both in construction and operation of buildings.</p>
	<p>Amount of tap water saved.</p>
	<p>Amount of segregated waste sent under a selective collection system.</p>
	<p>Types of raw materials that had their responsible source evaluated.</p>
	<p>Positive result from the Labeling process - Procel label.</p>
	<p>Health and safety program implemented.</p>
	<p>Frequency and severity of work-related accidents.</p>
<p>Sustainable construction criteria to be met by infrastructure construction works.</p>	<p>Amount of reduced CO₂ emissions - both in construction and operation of buildings.</p>
	<p>Amount of tap water saved.</p>
	<p>Amount of raw materials that had their responsible source checked.</p>
	<p>Amount of energy saved by implementing a solar power program for public lighting.</p>

Environmental and social responsibility - Meeting the performance defined based on this set of principles, criteria and indicators requires considering the impacts on implementation costs of programs and public policies and of processes and their products. If, on the one hand, there is a cost for organizations that undertake to comply with their social and environmental responsibility, on the other hand there are social and environmental benefits; stronger learning systems; contribution to the good reputation of companies and organizations (public and private); and opportunities for investment in the carbon market.

Carbon offsetting - Adopting the criteria for developing carbon offset projects should be integrated with actions and programs that go beyond planting trees, which is

currently one of the alternatives - and perhaps the most advertised - to reduce carbon dioxide emissions in the atmosphere. But it takes a systemic view that allows integrating emission reduction (which includes applying eco-efficient solutions, rational use of natural resources, assessing the companies' energy matrix, etc.) and emission offsetting.

For a sustainable project management, goals, indicators and action plans should be outlined. One of the actions that may be planned for each of these steps is, for example, the carbon footprint offsetting program, which encourages the use of vehicles that run on ethanol or biodiesel, the search for energy efficiency of companies, "green building" projects and monitoring of carbon emissions before, during and after



Encouraging the use of ethanol or biodiesel vehicles and searching for energy efficiency are some of the actions aimed at offsetting the carbon footprint.

events. Another example is the air quality management, which may include building more bicycle paths that provide access to major event sites, for example.

The “green building” concept may be applied to the construction of stadiums and hotels. For example, the structural materials to be used should not be harmful to health and the environment, should originate from sustainable sources and prioritize energy consumption; the technologies used should reduce water consumption and promote water reuse; energy consumption should be minimized (with intelligent refrigeration, lighting and ventilation systems) and waste should be managed in both the construction and operation phases.

Reduce, reuse and recycle -

The sustainable measures also

involve waste management, based on the three Rs (reduce, reuse, recycle), water and sewer management, focusing on reducing the use, and also the policy on engagements: contracts should prioritize suppliers that adopt sustainable management principles for their services and products.

Certifications - There are several certification criteria that ensure “green buildings”. Projects and construction of stadiums and quarters may receive an internationally recognized certification (Leed, Acqua, Breeam, etc.). In Brazil, two environmental certifications focusing on construction (project and building process) are currently used: Acqua, created in France, already adapted for Brazil; and Leed (Leadership in Energy and Environmental Design), a U.S. certification. Bream (Building

Research Establishment Environmental Assessment Method), in turn, created in the U.K., is being introduced in the Brazilian market.

ISO 14001, the standards that set guidelines for corporate environmental management, have been gradually adopted by real estate developers, especially after the ISO 9000 culture grew stronger. Conversely, large organizations and/or institutions, which aim to perform their construction processes with environmental and social responsibility, tend to internally develop customized and personalized certification standards. In this case, it is necessary to recognize the essential involvement of an outside auditing agent.

Microeconomy and social impact

Thousands of microenterprises will benefit

In addition to the impact on the macroeconomy discussed so far, the World Cup also impacts a multitude of hundreds (even

thousands) of micro and small enterprises and services that will certainly be greatly boosted. Besides the direct and indirect impacts on economic sectors already mentioned on page 4 here in, there are at least 11 other sectors including a large number of small, medium and large-sized companies that will be directly

World Cup's impact on 11 economic sectors

Sector	Total GDP per sector (R\$ million)	Sector GDP growth due to the Cup	Total impact (R\$ million)	Direct impact (R\$ million)	Indirect impact (R\$ million)
Textile	18,604.99	3.12%	580.47	0.07	580.40
Parts and accessories for motor vehicles	23,416.56	2%	469.23	3.87	465.36
Household appliances	4,193.7	10.24%	429.40	0.11	429.28
Electrical machinery, devices and materials	15,922.79	2.41%	384.20	42.78	341.42
Machinery and equipment, including maintenance and repair	31,675.18	0.84%	267.64	1.24	266.39
Wooden products - including furniture	11,182.77	2.32%	259.97	0.38	259.59
Leather goods and footwear	9,305.75	2.61%	242.70	0.16	242.54
Medical, hospital, measurement and optical devices/instruments	9,641.35	1.36%	131.44	0.60	130.83
Other transport equipment	9,494.36	0.86%	81.92	48.37	33.54
Trucks and buses	3,331.29	1.43%	47.62	37.41	10.21
Office machines and computer equipment	3,380.72	0.12%	3.95	0.21	3.74

These sectors includes small, medium and big companies.

GDP base year - 2010

Table 9

Chain reaction effects arising from the World Cup stimulate and encourage social benefits such as: increase in income and decrease in violence and crime.

affected by the World Cup, as shown in the table below.

Social effect - Another indirect impact scenario involves the social effects and chain reaction arising from World Cup-related activities.

The impacts mentioned so far can be classified as systematic as they refer to expected variations in the aggregate behavior of economic sectors. For this generality and predictability, these impacts are susceptible to quantitative estimates.

What this study refers to as specific impacts are those that are particular to the microeconomic or social characteristics of the event and the people affected by it. These include, among others:

- ▶ **The Volunteering Program impacts on the people's education and income;**
- ▶ **The country's exposure in the world media and consequential effects on tourism;**

- ▶ **Potentially reduced violence and crime as a result of investments in security;**

- ▶ **Social benefits from investments in infrastructure; and**

- ▶ **The microeconomic impacts of the construction and improvement of stadiums and a whole new window of opportunities that is created around them because of the mega event.**

By their very nature, the specific impacts are not captured in models that describe the economic relationships between agents and institutions from a purely monetary and aggregate perspective, thus removing them from the scope of the input-output methods used. In fact, given the complexity of the interaction networks involved, it is often hard to find adequate quantitative models that reliably describe these phenomena, with qualitative analysis and case studies prevailing in such cases.

Risks and constraints

Steeplechase

For the people to fully benefit from the various socioeconomic opportunities brought by an event such as the World Cup, certain constraints or risk factors must be taken into account, as follows:

- ▶ **Meeting the needs of host cities:** a successful event depends on the ability to meet the diverse needs of the host cities by 2014, by means of actions and investments in public and private sectors. Some of these needs require Cup-specific actions, while others can be met in the context of broader actions and activities.
- ▶ **Capitalizing on the legacy:** preparing and holding the Cup will give rise to various tangible and intangible legacies. These legacies could bring well-being to the population in a timeframe extending far beyond the event itself. But for that to happen they must be well used by the country.
- ▶ **Economic efficiency:** the World Cup implementation activities and the use of legacy should be efficient. Lack of adequate planning and control may result in excessive or unnecessary expenditures, misallocation or misappropriation of funds, and failure to use opportunity costs.
- ▶ **External factors:** in addition to the risk factors directly associated with the Cup itself, there are several external constraints, at national and international levels, that are beyond the stakeholders' intervention capacity, but can bring significant risks to the process of preparing and holding the Cup.

What do the host cities need?

The 12 cities hosting the World Cup have different needs that must be satisfied for a successful event. These needs can be summarized in the following categories:

- ▶ **Energy**
- ▶ **Arterial transport (highways, airports etc.)**
- ▶ **Event infrastructure (stadiums, IBC/IMCs, Fan Parks)**

- ▶ **Hospitality system**
- ▶ **Safety**
- ▶ **Urban planning (public utility services, urban operations, quality of city streets, public transportation, operations under adverse conditions)**
- ▶ **Support services (food, taxi, communications, health and retail)**

The above list indicates a range between "large" and "small" needs.

In general, these needs can be satisfied by means of "top-down" or "bottom-up" public policies or actions. Each of these categories gives rise to various weaknesses and failures, as seen below. However, the risks are the same: that such actions and policies result in inefficient and costly interventions or fail to meet the needs in question.

Brazil has a long tradition of vertical town planning, where decisions are taken by central governments and spread out to local organization points. Often there is little local autonomy, little

Recent events in Rio de Janeiro and São Paulo show that the host cities have to improve planning aspects to prevent the matches from being held together with urban chaos.

Types of needs

Systematic	X	Individual
Common among the various cities		Specific to each city
Relating to federal and state responsibilities		Relating to city or private sector responsibilities

Table 10

feedback on the effectiveness and efficiency of decisions, and little control over the alignment of agents responsible for the stipulated policies. These characteristics can be identified not only in the relationship between the federal government and the other federal entities, but also at state and municipal levels.

Therefore, the need for any “top down” public policy or intervention introduces an institutional risk to the extent that, due to the flaws in the decision-making process, such interventions can be incorrect or unnecessarily costly, or simply not materialize.

As regards the difficulties of central planning, one can note the crystallization and political

takeover of public administration at various levels, which represents a significant obstacle to the implementation of bottom-up public policies. In fact, incipient attempts, in cities such as Rio de Janeiro, to develop urban solutions through subdivisions of the local government (the subprefeituras) or similar arrangements collide not only with coordination problems, “political will”, lack of resources and inflexibility of the legal instruments, but also with the very difficulty of articulating the peoples of each community in terms of shared responsibilities and needs.

Systemic risk - Considering these aspects, it should be noted that the “large” needs of the host cities are subject to central planning and direct government intervention,

being, therefore, subject to the systemic risk of institutional failure that may impact critical aspects of the event. The “small” needs, on the other hand, present difficulties of central planning, but can be remedied by private or public actions of each host city, as long as autonomy, initiative and resources are in place.

In general, failing to meet, in full or in part, the needs of venue cities may result in:

- ▶ **Poor quality of services provided to visitors and to the population;**
- ▶ **Bottleneck effect (limited number of visitors due to price increases or capacity exhaustion);**
- ▶ **Economic and human losses (caused by accidents, commotions, or other negative impacts from the inflow of visitors);**
- ▶ **Presentation of a negative image of Brazil in the international media coverage.**

Each of the foregoing needs is discussed below:

- ▶ **Energy:** the energy security of the host cities is an issue that, although essential, is not absolutely guaranteed. In light of recent events such as the nationwide blackout in November 2009, it is clear that, considering the current electrical system development status, the host cities are also not safe from threats to their energy supply.
- ▶ **Arterial transport:** in many cases, the distances between the host cities are transcontinental, covered only by highways in a poor state of repair. The major Brazilian airports - particularly in the cities of Rio de Janeiro and São Paulo - have exhausted their capacity due mainly to their poor infrastructure.
- ▶ **Stadiums:** three of the host cities will be building new stadiums for the World Cup, while the other nine are or will be undergoing renovations to meet Fifa's requirements. Given the complexity of the work involved,

it is a big challenge for all stadiums to be ready in time for the Confederations Cup in June 2013, a year earlier, as agreed upon by Brazil. Moreover, considering that many clubs and/or public entities share responsibility for the construction and renovation of stadiums, there may be no project standardization or compliance analysis pursuant to the requirements of FIFA (coordination risk).

- ▶ **Hospitality system:** this component is primarily a private sector concern. The hotel system

expansion expects to offer an additional 19,500 hotel rooms in the host cities by 2014. However, except for the cities of Curitiba, Rio de Janeiro and São Paulo, which have a better hotel infrastructure, there are not enough hotel rooms to meet the capacity requirements recommended by Fifa.

- ▶ **Public safety:** Brazil has a tremendous difficulty in addressing this issue, not only with regard to the safety of the general population, but also to the violence inside the stadiums.

Category of policies and actions

Top-down		Bottom-up
▶ Little feedback	Source	▶ Coordination problems
▶ Little monitoring and control ▶ Other failures in the decision-making process	Reasons for failure	▶ Political takeover for local interests ▶ People's crystallization and disarticulation ▶ Lack of funds
▶ Failures affect all the host cities	Scope of failure	▶ Failures affect each individual host city
Large-size needs	More adequate for	Small-size needs

Table 11

In order to support the tourist inflow, the hotel capacity of host cities is expected to expand by 19.5 thousand rooms until 2014.

The issue of public safety is difficult to solve, both because it is particularly subject to coordination problems, and also because, more than investment, in physical capital, it requires public policies that are consistent, intelligent, long-lasting and coordinated with other areas of public power.

- ▶ **Urban planning:** this item includes utilities such as electricity, water, telephone and street cleaning, as well as the quality of urban streets, appropriate schemes for traffic engineering, and public transport systems appropriately sized and organized. These are issues with which a large number, if not most, of the host cities have intractable problems. Recent events in Rio de Janeiro and São Paulo show that in general the host cities still have much to improve on this aspect, with coordinated planning and investments to prevent the matches from being held together with urban chaos.
- ▶ **Support services:** there are many private services that are essential to properly

serve visitors during the World Cup, such as food, taxi, communications, health and retail sales in general. As the supply of these services is largely independent of public policies, keeping to expected prices and demands according to market pressures, it is difficult to know if the necessary resizing will occur, especially in smaller host cities and/or cities with little tourism tradition.

Concern with the legacy

Investments and actions performed in connection with the World Cup will generate legacies in various forms of fixed capital:

- ▶ **Tangible capital (stadiums and other sports and leisure facilities);**
 - ▶ **Human capital (trained professionals in areas related to implementation and management of major events);**
 - ▶ **Technology capital (security and telecommunication equipment);**
 - ▶ **Brand capital (international exposure of Brazil as a tourist destination).**
- These legacies may continuously bring well-being to the population of venue cities and of Brazil as a whole in a timeframe extending far beyond the World Cup. However, this depends on a number of conditions. Perhaps the key is, of course, the successful completion of the event.
- ▶ **Advances in terms of accessibility, logistics and regulation of the airline industry;**
 - ▶ **Improvements in transport infrastructure (especially airports and highways);**
 - ▶ **Consolidation of marketing efforts aimed at promoting Brazil as a brand and a product abroad;**
 - ▶ **Expansion and maintenance of training policies for personnel in the tourist sector; and**
 - ▶ **Expansion and facilitation of private investments in tourism and hospitality.**

The risk of economic inefficiency

Brazil's option for hosting the World Cup represents a decision to incur significant investments, making use of public and private resources that could be allocated to other purposes - schools, hospitals, income distribution, debt settlement etc. This trade-off carries an underlying cost, namely the opportunity cost.

International studies indicate that the opportunity cost implicit in hosting a flagship event can be significant. In fact, since the impacts of the event itself are temporary, the return on investment critically depends on how much the host country capitalizes on the event's legacies. The return issue is

further expanded by the fact that very often a large part of public investments in question is funded through the expansion of public debt, which embodies its own costs and adverse macroeconomic effects.

For Brazil to obtain the greatest social return on the World Cup's investments and actions, they must be carried out efficiently, i.e. at the lowest possible cost (in terms of resources and time) to derive the desired results. In concrete terms, this means performing works and actions within the budgets and deadlines that are strictly necessary to ensure quality deliverables.

Reviewing the history of public investments in Brazil, we identify several common reasons for inefficiencies:

- ▶ **Insufficient or incorrect budgets;**
- ▶ **Readjustments due to errors or omissions in initial projects;**
- ▶ **Readjustments due to poorly performed construction works;**
- ▶ **Costs due to delays or interruptions in construction works (overtime, emergency biddings, rework due to deterioration);**
- ▶ **Costs due to changes in the macroeconomic, foreign exchange or financial environment.**

Luckily, except for the last item, all these types of inefficiency can be prevented through the wise application of public management principles - well planned and executed biddings, use of

The World Cup is also subject to systemic risks due to external macroeconomic factors that affect foreign visitors and capital flow.

technical expertise and, especially, of thorough and continuous monitoring and control efforts.

The unforeseeable external factors

So far, only management risks were considered, i.e. the negative impacts of certain decisions on preparing, implementing and capitalizing on the opportunities of the World Cup, and the consequent generation of well-being. These risks are specific to the Cup and, to a large extent, can be mitigated or avoided through adequate actions and policies, especially those involving monitoring and control.

However, the World Cup is also subject to systemic risks due to external factors, beyond the influence of stakeholders, affecting

Brazil as a whole. We highlight the following sources of risk:

- ▶ **International macroeconomic scenario, affecting the flow of foreign visitors and the availability of foreign capital for investments;**
- ▶ **National macroeconomic and tax scenario, affecting the flow of Brazilian fans and the budgets for construction works and public and private efforts;**
- ▶ **National political scenario, affecting the coordination of actions and investments by government levels;**
- ▶ **Other risks not currently identified. Exactly because of their unknown character, such risks may arise unexpectedly during the process of preparation and holding of the Cup.**

Challenges and opportunities

How to maximize the positive effects of the World Cup

An event such as the World Cup entails direct and indirect socioeconomic impacts, as discussed in this study, and it is possible to determine its effects on the country and host cities and measure and evaluate risks and bottlenecks that may threaten its success. At the same time, together with investments in infrastructure, the World Cup brings media attention, economic activity, social mobilization and debates on urban interventions, numerous opportunities for the government, the private sector and the society in general.

The World Cup is a landmark in the history of its host cities, meaning that its importance extends far beyond the organization and timing of matches. It is an actual opportunity for these locations - which in Brazil will be a record number - to improve the quality of life of their people, in addition to being an excellent opportunity to generate revenue for different sectors of the economy. The need for infrastructure works is particularly interesting for the

country, as its rate of growth could be impaired in the coming years without the significant investments expected for the expansion and improvement of airports and ports, urban mobility, energy services, telecommunications and other measures to be taken in record time for the Cup. Gains for the tourism industry represent clear long-term benefits. In Brazil, the sector has significant growth leeway, as the number of tourists it receives - around 5 million - has remained virtually stable for the past five years. In Latin America, the record holder is Mexico, which received 21.5 million tourists in 2009 - according to official data from the Mexican Ministry of Tourism - or four times as many.

In 2014, the country will be the focus of media efforts that should invest R\$ 6.5 billion in World Cup - related advertising and information, as seen in the first part of this study.

This is the cue to develop an efficient reputation management and show the rest of the world, for example, that in addition to soccer and samba, Brazil has centers of excellence in research, development and innovation, a complex, stable

The World Cup may put an end to Brazil's five-year stagnant foreign tourist inflow, from current 5 million to 7.48 million until 2014 and 8.95 million in 2018.

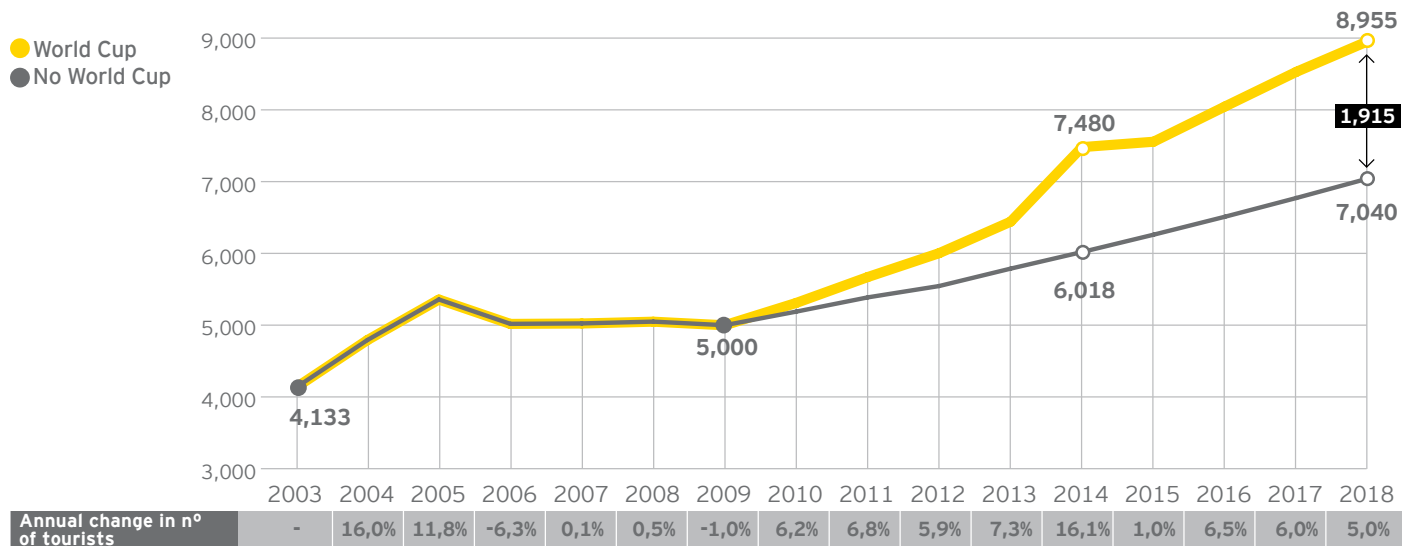
and robust economy, and modern and multicultural cities.

Taking advantage of the opportunities generated by the World Cup will depend on knowing

how to identify these opportunities and underlying challenges into some major thematic topics, each with its strategic role: governance and planning; monitoring, control and

transparency; financial management; regulatory environment; infrastructure and services; human capital; reputation management; legacy and sustainability.

International tourist inflow In millions



Revenue generated US\$ billion

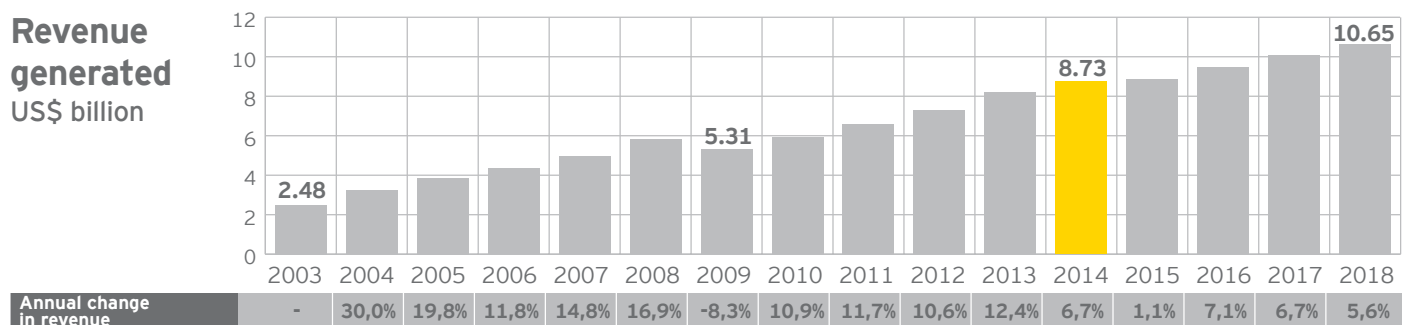


Table 12

Governance and planning

World Cup Master Plan for each host city

The starting point to face the challenges of managing activities related to the World Cup is to establish a proper planning, governance and management process. This structure can be defined with the preparation of a master plan. The plan should detail all the projects for the Cup's organization and success, defining actions, priorities, deadlines, investments, costs and accountabilities, as well as identifying and mapping the opportunities. An adequate level of integration among all projects is essential, considering that they will be performed by local, state and federal governments, or even by the private sector.

In the case of the host cities, structuring the governance, defining the master plan and

the management model are key issues to establish the role of each level of government and to fulfill the obligations assumed before Fifa and the World Cup Organizing Committee, as well as the determinations of the Responsibility Assignment Matrix, a document executed by the federal, state and local governments and clubs whose stadiums will receive World Cup matches.

The matrix defines responsibilities and timelines for each organizing member regarding the works at stadiums and around them, urban mobility and renovations at airports and tourist and port terminals. The set of obligations is very significant and includes, besides the Responsibility Assignment Matrix, the Hosting Agreement, the Host City Agreement, the specifications, among others.

As mentioned, the roles and responsibilities of the host cities go

The master plan should include structuring the governance, the processes, the budget, the coordination and integration of projects, contractual commitments and planning the activities that will be performed.

far beyond renovating or building the stadiums where the matches will take place.

Compliance with this set of obligations will be monitored by different players, among which: the organizing committee, Fifa, control agencies of various government levels, the Steering Committee of the Strategic Plan of the Brazilian Government Efforts for the Implementation of the 2014 World Cup (Portuguese acronym - CGPEAC), composed of 20 federal agencies and the society in general

Definition of roles - In-depth study of all these documents and the responsibility of each participant is part of governance and planning structuring.

The Cup's master plan is the major instrument for coordinating all activities over time - from now to the transition to the post-Cup legacy. In brief, it involves structuring the governance, the processes and the budget;

coordinating activities relating to contractual commitments; planning processes, routines and monitoring tools; the planning and articulating committees, forums and work groups; the action plan on generating additional opportunities.

It defines actions and accountabilities, communication protocols, deadlines, quality, human resources, risks, supplies. It is part of the design of a strategic plan that provides a long-term perspective that is essential to outline the opportunities brought by the World Cup.

In an event of this size risks are significant, so all roles must be well defined. It is also important to consider the complexity of governmental management, the various political transitions that will occur before 2014 and the specific rules for electoral years (2010, 2012 and even 2014), which set limits and conditions for engaging construction work, fund raising and resource allocation.

Monitoring, control and transparency

Project management focusing on risk analysis, control and monitoring

Efficient management includes monitoring, control and transparency. These stages and functions include a set of plans, coordination and monitoring tools, diagnostic and risk assessment tools and physical and financial monitoring tools. For an even more effective monitoring, it is suggested that a robust project management and integration layer be created, focusing on evaluation and prioritization of potential risks in order to allow greater predictability

of risk factors, thus ensuring an adequate and timely decision making process.

Once governance has been established and planning has been prepared (with defined priorities, deadlines, etc. as described in the master plan), the implementation phase begins. Monitoring and control are related to this phase, and will ensure the adequate accomplishment of objectives defined in the planning.

Deadline, cost and quality -

As a general rule, the success of a project can be summarized in three main objectives: meeting the deadline, the estimated cost and the required quality. Clearly, these objectives should be achieved without prejudice to full compliance

Transparency represents a challenge for a country with little tradition of exposing public spending and related accountabilities, and this can be an institutional legacy.

with the entire set of laws, rules, policies, ethical principles and other obligations that underlie the actions that should be deployed. Monitoring and control pursue these three objectives. In the case of the Cup, the deadline gains a very important dimension: there cannot be one single day of delay. Besides the World Cup, the Confederations Cup will be held in 2013, and part of the host cities must be prepared for this a year in advance.

In order to monitor the construction work efficiency, timeliness and transparency, the federal government formed the CGPEAC. This Steering Committee is responsible for the 2014 World Cup Management and Monitoring Support System (SGMC), an online

tool that will monitor the activities of the host cities, through the Transparency Portal. The cities and states have committed to feeding the portal with data on the projects, bids, contract execution, tax incentives, grants, sponsorships, funding, progress of works.

The Brazilian Office of the Controller General implemented the Transparency Portal, which may be accessed by the general population, the Audit Courts and the governments, in an effort to allow the monitoring of expenditures by all interested parties. This represents a challenge for a country with little tradition of exposing public spending and related accountabilities, and this can be an institutional legacy.



Financial management

BNDES financing linked to the World Cup

The World Cup will require significant investments, both from the governments and the private sector. The challenge of raising funds for investments in infrastructure and services (stadiums, hotels, highways, airports, urbanization, security and energy), and operating expenses and local structural costs, is far from small - the value should exceed R\$ 22 billion, as seen in this study.

From the moment Brazil was chosen to host the 2014 World Cup, several scenarios have been outlined.

By mid-2009, one of the funding options banked on was the creation of Public-Private Partnerships (PPPs), especially for renovating stadiums and investing

in urban mobility. The PPP model, which combines the ability to invest, to attract capital and the managerial expertise of the private sector with the public interest and part of government resources, has not consolidated itself as the predominant model of financing for preparing the World Cup.

In the second half of 2009, it was announced that the National Bank for Economic and Social Development (Portuguese acronym - BNDES) will provide lines of credit to fund works and buildings related to the 2014 Cup.

The first line announced amounted to R\$ 4.8 billion, with a limit of R\$ 400 million for each stadium that will host World Cup matches, provided this amount does not exceed 75% of the total project value. The funds are directed to arenas and infrastructure and urban development works. BNDES informed that part of the credit line

may be used for private arenas, provided there is partnership with public entities.

In February 2010, BNDES announced a new line of credit of R\$ 1 billion for the renovation, expansion and construction of hotels. The increased capacity of the hotel system aims to meet the demands of both the World Cup and the 2016 Olympic Games. Just before that, the federal government had provided as much as R\$ 9 billion from the Employees' Severance Indemnity Fund (Portuguese acronym - FGTS) for works in the transport sector to facilitate access to stadiums, airports and ports in the 12 venue cities.

The funds, which form the so-called Growth Acceleration Plan (Portuguese acronym - PAC) on Mobility, prioritize public transportation, such as bus lanes, light rail vehicles

One of the challenges will be to obtain funds for management, projects, and minor or supplementary works. An alternative is the use of non-financial assets.

(LRVs) and subway. In view of these announcements, one may perceive a great deal of federal government's involvement in financing the infrastructure for the World Cup, particularly the large-sized works. Part of these funds is mixed with actions of the second part of PAC, the so-called PAC 2. The areas to be covered by these funds include energy, logistics, urban mobility, highways, ports and airports.

Financing alternatives -

The challenge imposed on the financing area is to obtain funds for minor or supplementary works in the host cities that focus, for example, on reurbanization, signage, upgrading buses and taxis, in addition to other event-related activities that also require expenditures such as management, projects, training programs, communication. State and local governments may have budget limitations on these investments and spending, especially when considering the Fiscal Responsibility

Law, which requires the search for alternative investments. These alternatives, which could mean new opportunities for different players, include the use of counterparties and non-financial assets.

This may mean the use of tax exemption mechanisms, the extension of public concession periods, the use of land and public spaces for advertising, among others.

It is not always necessary to offer incentives, but just a guarantee of a trade agreement. However, it is necessary that local governments clearly map all these possibilities. An example of successful fundraising for urban development without using taxpayers' money is the Certificate of Potential Additional Construction (Cepac), an instrument created by federal law, which has been used successfully in some cities.



Regulatory environment

General Law of the World Cup and organizers' requirements

Tax exemption policies will be part of a set of changes that will compose a new regulatory environment in the country, which will be created for purposes of holding the Cup and will include other temporary changes to, for instance, the rules on immigration, customs, and temporary imports and foreign remittance of funds. A large part of these novelties will be put together in what is being called the General Law of the World Cup, to be reviewed by the Congress before 2011.

This set of laws should address the requirements made by the entities responsible for the event, including easier means of obtaining entry visas for country delegations and those working at the matches, and tax exemption for import and export of products and equipment related to competitions.

Tax exemption - The federal government has announced it will exempt from federal taxes between January 2011 and December 31, 2015, the World Cup organizers, local committees and their partners (including the television network with broadcasting rights) in all business transactions related to the Confederations Cup and World Cup. This decision, however, is also subject to approval by Congress.

The reduced tax amount, the government argues, will be small in view of the expected economy upturn (which, in turn, will cause an increase in collection). Many industries can benefit from these measures. Some supply chains related to potential products and services for the World Cup might benefit from the tax relief, also in terms of competitiveness with their international competitors.

Agencies that will receive tourists and delegations, producers of electronic equipment, sports goods, building materials, beverage distributors and even insurers are among the sectors that could profit from the measure.

Some supply chains related to potential and services for the World Cup might benefit from the tax relief.

In view of the potentially increased revenue, companies must be alert to the relevant changes that will occur in this environment, especially tax benefits.

Controlled advertising - Another organizers' requirement that may cause changes in legislation refers to the exclusive partners' brand advertising in and around the stadiums, as well as other locations holding events linked to the World Cup. In some cities that have restrictive legislation on street advertising, the local governments may consider specific projects that allow advertising in some predefined points only during the month of the World Cup.

Finally, a controversial topic under the regulatory environment issue refers to the Bidding Act (Law No. 8666), which, due to its requirements, may affect the timing of contracts and works. The host cities' organizers should not expect significant short-term changes in procurement legislation, but instead should use planning tools to anticipate the actions necessary to avoid running risks of delays or noncompliance with bidding rules.



Infrastructure and services

Success factor

To host the World Cup matches, Brazil needs investments in stadiums, in accordance with a number of requirements imposed by Fifa, and also in infrastructure and services. Infrastructure stands for airports and ports with passenger flow capacity of up to 600 thousand foreign tourists and more than 3 million Brazilian tourists at the time of the games, roads in good state of repair, urban mobility (including buses, taxis, and light rail vehicles - LARVA, trains, and subways), telecommunications, energy and sanitation. The service sector includes hotels, bars, restaurants, tourism in general and public services such as health, safety, and information to tourists, immigration and customs.

Studies have shown that the country is able to prepare in time for the World Cup; however, it is generally agreed that there is a lot of work ahead to be done, and that schedules are tight already.

Overloaded airports - One of the major challenges - if not the greatest - are the airports. The demand for flights will be very high in a continental country with some of the host cities being separated by thousands of miles. The expansion of concourses and

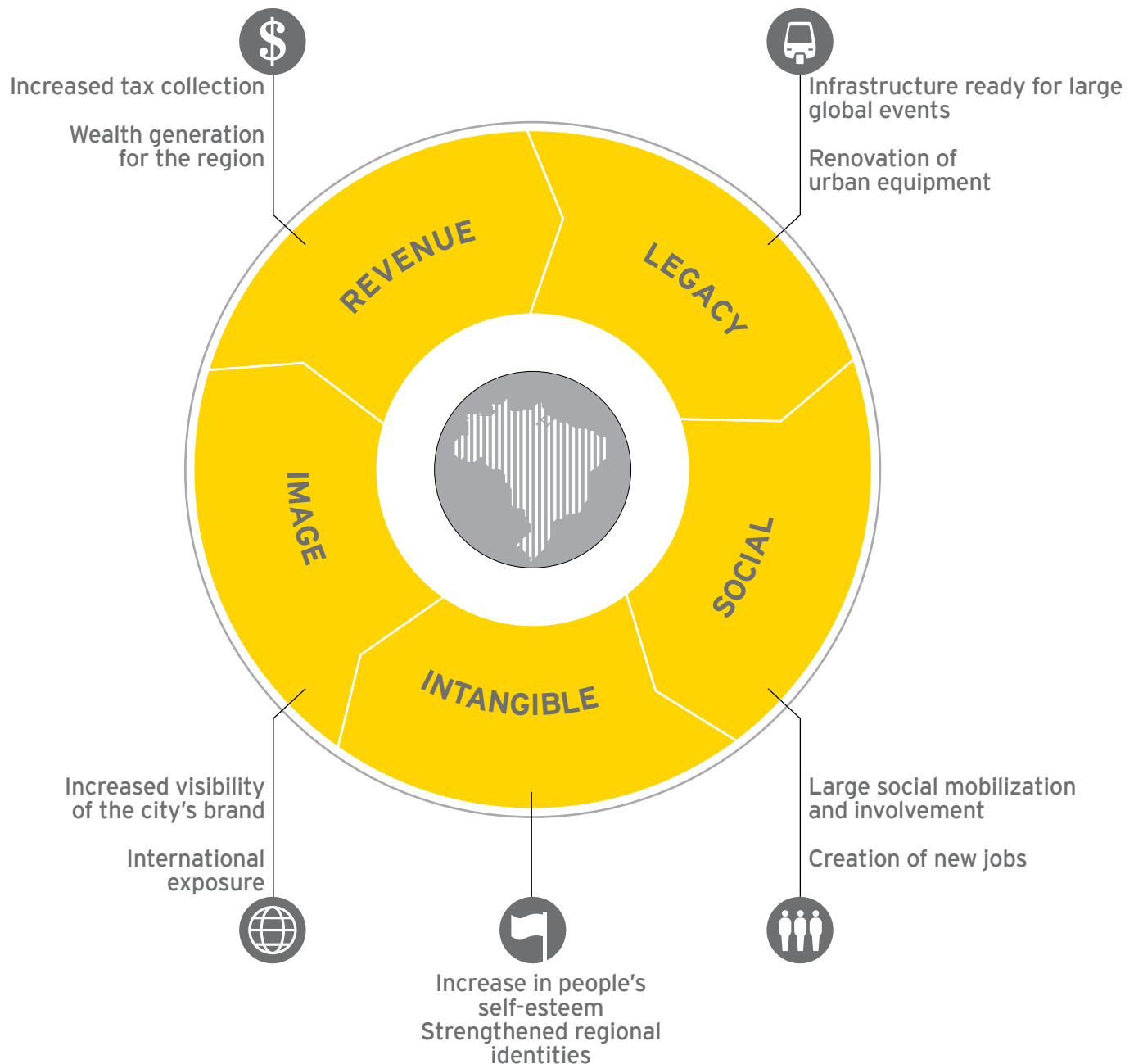
passenger terminals has not yet begun, with the most part being expected for 2012 and 2013 only, thus increasing the risk of delay.

Today, major airports are already saturated, and the most critical ones are those in Brasília and São Paulo (Congonhas and Guarulhos), according to a study by the National Union of Airlines (Portuguese acronym - Snea) and Alberto Luiz Coimbra Institute for Post-Graduate Studies and Research in Engineering (Portuguese acronym - Coppe) of the Federal University of Rio de Janeiro (Portuguese acronym - UFRJ). These two cities are the main points of connection to other regions of the country.

Based on this survey, Cumbica international airport, São Paulo, received 21.6 million passengers in 2009, although it was designed to operate at a 20.5 million limit. After the proposed works of expansion and construction of a third terminal have been completed, passenger traffic should be around 29.5 million, which is close to the 30.5 million expected for 2014. At Congonhas city airport, São Paulo, the flow of passengers reached 13.7 million in 2009, whereas its capacity is 12 million - aggravated by the fact that there is virtually no room for expansion.

One of the major infrastructure challenges are the airports, considering an expected additional 600 thousand foreign tourists and 3 million Brazilian tourists during the competition.

Brazi's wins with the World Cup



This is a strategic terminal for the Cup: according to a project of the city of São Paulo, a monorail will connect subway and train lines to Congonhas airport and Morumbi stadium.

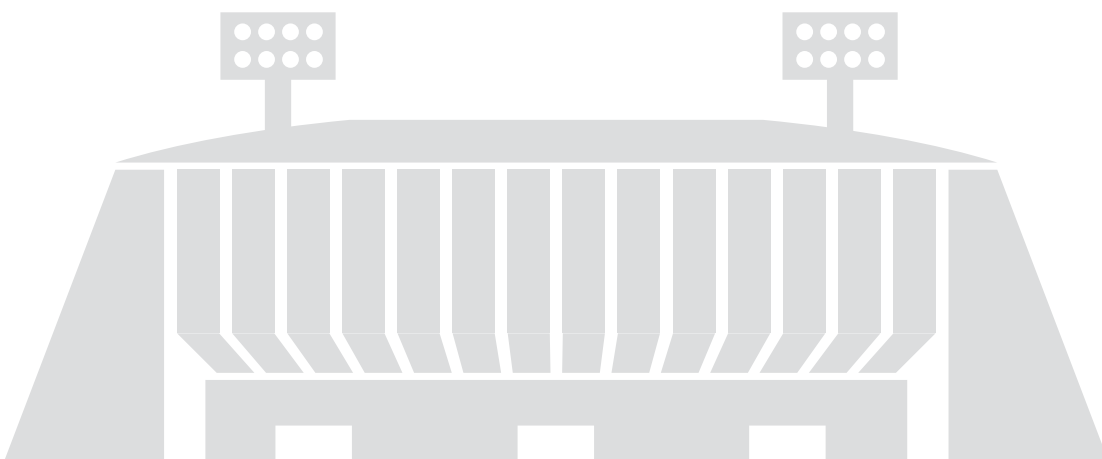
Juscelino Kubitschek airport, in Brasília, is the one in worst shape, according to the study: in 2009 the number of passengers reached 12.2 million, while the limit for that airport is 10 million. With the expected expansion work, the capacity will increase to 18 million people, but demand will already be 19.9 million.

Broadband - The other infrastructure items, such as energy, sanitation, telecommunications and urban mobility have been receiving investments within the context of the federal government's Growth Acceleration Program (Portuguese acronym - PAC).

As regards telecommunications, the National Broadband Plan has been announced, which should receive investments of R\$ 13 billion of public resources, including R\$ 3.22 billion in Telebras, chosen to be the program manager. The plan's purpose is to increase from 12 to 40 million the number of households with broadband access and subsidized prices until 2014.

A good broadband access service is important for the tourists that will be drawn to Brazil for the World Cup. And also the mobile broadband (3G technology), which is essential to avoid data transmission failures in cases where a large number of people are gathered, such as in stadiums, sending messages, photos and videos at the same time.

Service improvement - It is of little use to provide the country with



Services such as broadband, hotel capacity, safety, and contingency and crisis management plans are essential to ensure a quality event.

infrastructure without concern for improving the services which will make it work. An event such as the World Cup demands thousands of new hotel beds (an investment of the private sector, often encouraged by the government), but also special operations related to security, health (including information services and promptness of the Sanitation Agency), urban traffic and airport terminals, with training and expansion of immigration, customs and flight control staff.

Investments in security, including re-equipment of the police force and release of funds for actions such as the National Program on Public Security and Citizenship (Portuguese acronym - Pronasci), may be particularly attractive to local populations, as they will have a legacy after the World Cup ends. The federal government announced

that Pronasci will receive, within the scope of PAC 2, R\$ 3.2 billion. Regarding the security operation during the event, the World Cup organizers require that a plan be submitted by June 2011. Another service that must be flawless is the operation of contingency and crisis management plans in emergency situations. There are several types of emergencies that should be anticipated and for which specific strategies should be developed: blackouts (use of local generators, for example), evacuation of stadiums, security problems and even epidemics, strikes, etc.

Stadiums - The 12 host cities have to renovate, make structural changes and in some cases build from scratch their stadiums. In all capitals, the arenas will undergo renovations in order to meet Fifa's requirements and be entitled to

host three to five matches of the World Cup.

These requirements include, for example, covered stands, parking for more than 10 thousand vehicles and buses, nearby heliport, media center, media room and TV studios of predefined sizes, VIP area and a number of detailed security and compliance specifications.

As for capacity, there should be at least 40 thousand seats for international matches and the final match of the Confederations Cup, and 60 thousand for the World Cup's final match. Seats should be individual, with minimum height and width dimensions and other specifications defined by Fifa. The field visibility must be perfect for all fans, hence the requirement, for example, of accurate calculations of the inclination of the stands.

Human capital

The Cup will count on thousands of volunteers – mostly bilingual

The demand for human resources, which should generate hundreds of thousands of job opportunities, will not be limited to the days of the tournament, but will also extend to the period of preparations.

All services directly or indirectly related to the World Cup, such as tour guides, volunteers, hotel and restaurant staff, taxi drivers, bus drivers, public servants, must be

prepared to receive tourists from all over the world.

This preparation will involve an effort of local governments in training, which should include, for example, foreign language classes. Relying on qualified staff will be one of the great challenges of the 2014 World Cup, in a training effort that will also involve the private sector.

In order to generate a positive image of the country, which is desired, an international service standard must be developed – starting from service at airports,



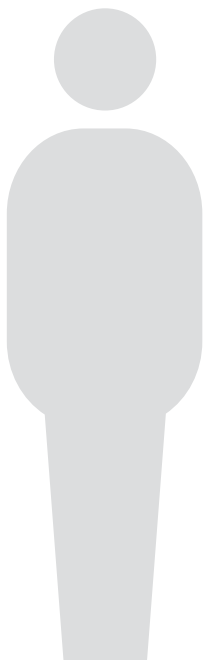
Relying on qualified personnel in technology, languages and other areas will be a challenge and a training effort that will also involve the private sector.

but also including activities related to tourism and trade. The governments and their partners will be responsible for helping society prepare for the event and have adequate training to provide quality services.

The Volunteering Program is one of the Cup's flagships in the area of human resources. It involves thousands of people - mostly students, but also a significant rate of senior citizens - that will support the fans, especially foreign tourists. Volunteers receive training, speak different languages, wear uniforms and are identified by badges. They will be at all of the great circulation

areas, especially stadiums and surrounding areas, as well as Fan Park sites in the host cities.

The program members will receive - in consideration for their work, which starts at the airports - training, uniform, meals and spending money. The 2006 Cup in Germany, volunteers totaled 15 thousand and in Brazil, where the number of host cities is larger, this figure could double. In terms of legacy, the Volunteering Program has great qualities, as it may be associated with the training of personnel in, for example, IT, a foreign language, and social inclusion.



Reputation management

Reputation gain may exceed financial gain

The World Cup's financial return to organizers, governments and companies in various economic sectors is undoubtedly significant. However, especially for the country, the host cities and organizers, the reputation gain provided by successful event can be even more important than revenues. The self-esteem of society in general will be positively affected. A successful World Cup will be a step up for Brazil in terms of international reputation.

For Brazil, the opportunity to host the 2014 World Cup can contribute a great deal to improve the country's image abroad, as it qualifies, over the coming years, to be listed as one of the most developed nations.

Depending on the success of the tournament and how to capitalize on this positive image, the country will benefit for many years. A good reputation will yield, for example, an increase in tourist activities, attracting foreign investments, greater visibility and credibility.

World Cup atmosphere -

The reputation gain is linked to the reputation and communication management of the Cup as an event, which involves planning and detailing cultural and sports efforts, simultaneous or supplementary events, activities that encourage people's mobilization and engagement, and activities that help create the "World Cup atmosphere".

It also includes the creation of a visual communication language for the cities, the use of urban elements associated with the

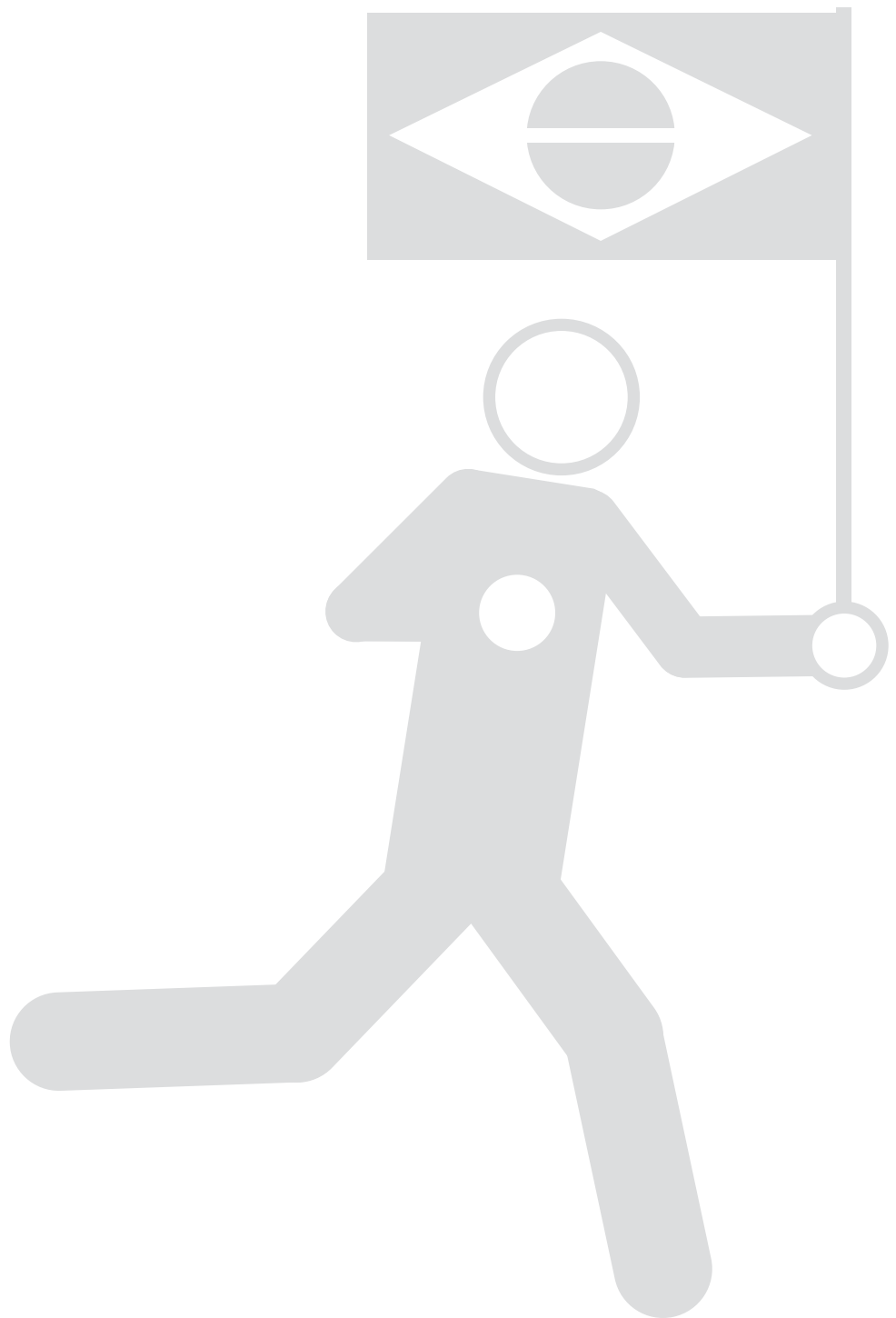
Cup and a more comprehensive communication strategy. Typical festivities, cultural and artistic events - that unveil a country's identity - may have greater national and international visibility not only during the tournament, but also in the four preceding years, subject to Fifa's previous approval. Thus, all that characterizes Brazil is exposed along with the World Cup. Similarly, all events and ceremonies linked to the matches could be used for a positive association of the tournament with the country, the host cities and the organizers.

The Transparency Portal, for instance, could be disseminated as an example of modernity and moral ethics in a country whose international image has often been associated with corruption and weak institutions. Succeeding in mobilizing and engaging the society

Cultural events that unveil a country's identity may be associated with the Cup, subject to Fifa's previous approval. Thus, all that characterizes Brazil is exposed along with the World Cup.

in all that concerns the World Cup with creative stimuli that leverage people's spontaneity, can help show all of Brazil's social capital. Creating the "World Cup atmosphere" is another example of good reputation management. It refers to all the tournament-related experience that a host city will transmit to its residents and visitors. A foreign tourist arriving at the airport, for example, should sense the "World Cup atmosphere" already upon arrival, in the form of leaflets, banners and the warm welcome by volunteers, for example.

All of the city streets and corners, as well as its people, should transmit this World Cup fever, so that visitors can have a memorable experience with the World Cup, always associated with their tourist visit. The "World Cup atmosphere" does not necessarily have to occur only during the matches.



Legacy and sustainability

The Cup may leave tangible, institutional and social legacies

The reputation management is also related to the Cup's legacy. The image will be positive if people realize that the event left an important legacy to society as a whole, and not a huge debt to the country or buildings that prove to be useless and costly. There are three types of legacy: the tangible, the social and the institutional legacies.

The tangible legacy, just as the name says, is represented by stadiums, buildings, urban mobility infrastructure, telecommunications, ports, airports, among others.

The social legacy takes many forms: improved self-esteem of the people hosting the World Cup, the gains in education and training provided by the Cup's experience and temporary jobs, the social inclusion of underprivileged youngsters and elderly people under the

Volunteering Program, the inclusion through sports, the improvements obtained with investments in health and safety, and income generated by increased economic activity.

And the institutional legacy is provided by the experience of managing a mega event, under tight schedules, involving various public entities and government powers in unprecedented joint efforts. It is a gain in coordination, organization and also in the experience of making alliances and partnerships among extremely different "players" driven by a common goal.

The Cup legacy issue involves defining the event's success, which in this case, has a specific outline for each of the "players" involved. For the fans, the notion of a successful event is associated with international standard services and with watching the matches and participating in events comfortably, safely and peacefully. For the governments, the World Cup success can be measured by increased tax collection and wealth generation as well as by the

As a social inheritance the World Cup may provide improved self-esteem of the people, gains in education and training and investments in health and safety.

reputational and visibility gains that can later translate into political capital.

For the people, the idea of a successful World Cup is that of an event organized with no waste of public resources, with transparent management and with the ability to leave a legacy that justifies heavy investments, such as the infrastructure that enables holding other major events and urban equipment renovation. Finally, for the organizers, the Cup's success will result from successfully achieving the goals of all stakeholders (fans, society, governments), ensuring full compliance with obligations undertaken and contributing to strengthening the World Cup as one of the world's largest events.

The longevity of the World Cup's positive effects will depend on how satisfied the stakeholders will be individually and as a whole. Lastly, the Cup's legacies will be an accurate measure of the event's success and may represent unique opportunities for the country, the host cities and their people.



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