



MUNICÍPIO DE
VENÂNCIO AIRES
Capital Nacional do Chimarrão



CISVALE
CONSÓRCIO INTERMUNICIPAL DE
SERVIÇOS DO VALE DO RIO PARDO



VENÂNCIO AIRES



CANDELÁRIA



GRAMADO XAVIER



HERVEIRAS



MATO LEITÃO



PANTANO GRANDE



PASSO DO SOBRADO



RIO PARDO



SANTA CRUZ DO SUL



SINIMBU



VALE DO SOL



VALE VERDE



VERA CRUZ



BOQUEIRÃO DO LEÃO

SCENARIO



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Brazil

TERRITORIAL EXTENSION: 8.516.000 Km²
POPULATION: 207,7 millions habitants*

Source: Demographic Census 2010
*Estimation IBGE 2017

PIB: 1,796 trillions USD (2016)
PIB per capita: 8.649,95 USD (2016)
Source: IBGE Cities



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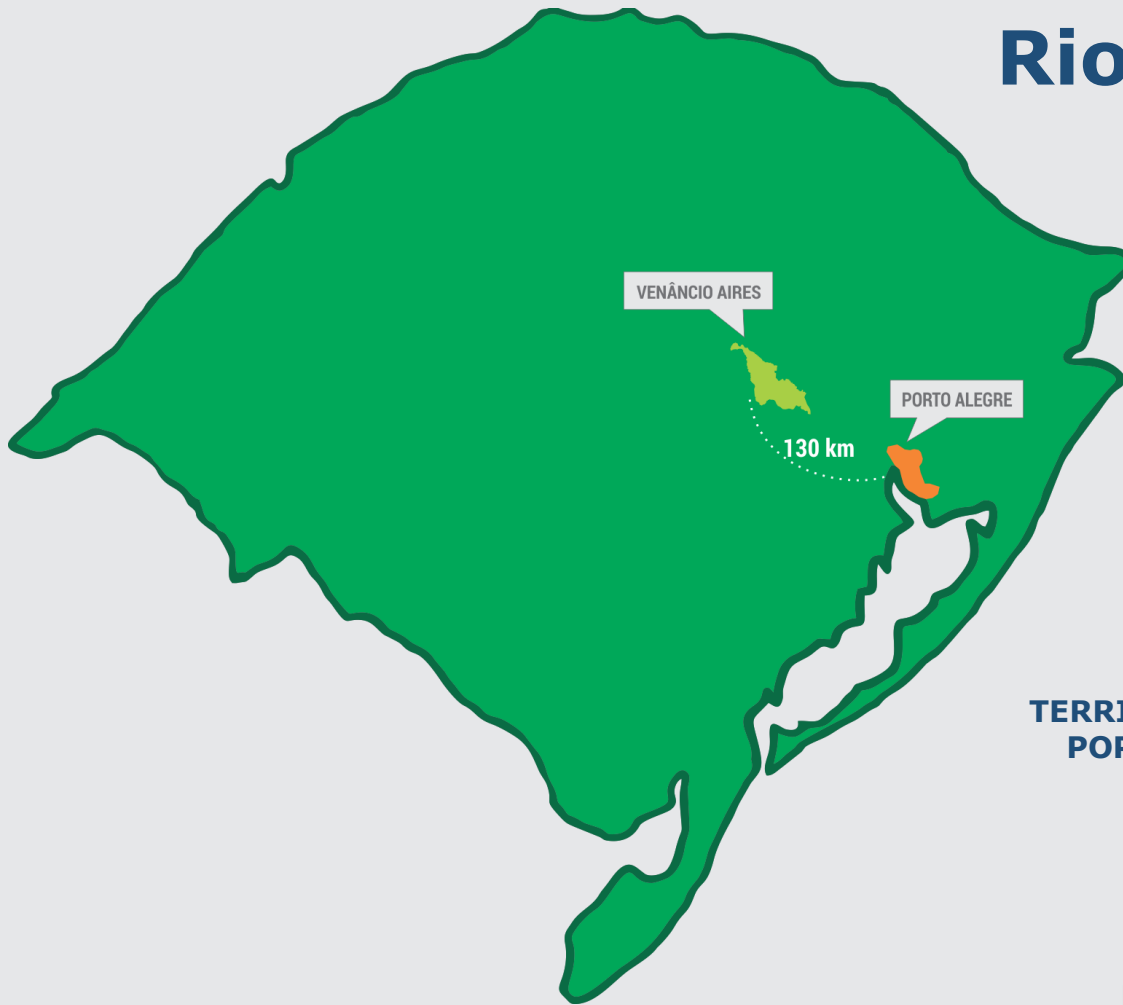


VERA
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BOQUEIRÃO
DO LEÃO

Rio Grande do Sul



TERRITORIAL EXTENSION : 281.748 Km²
POPULATION : 11,29 millions habitants*
CAPITAL: Porto Alegre

Source: : Demographic Census 2010
* Estimation IBGE 2017

PIB: R\$ 199,5 billions (2008)
PIB per capita: R\$ 18,378,17 (2008)
Source: IBGE Cities



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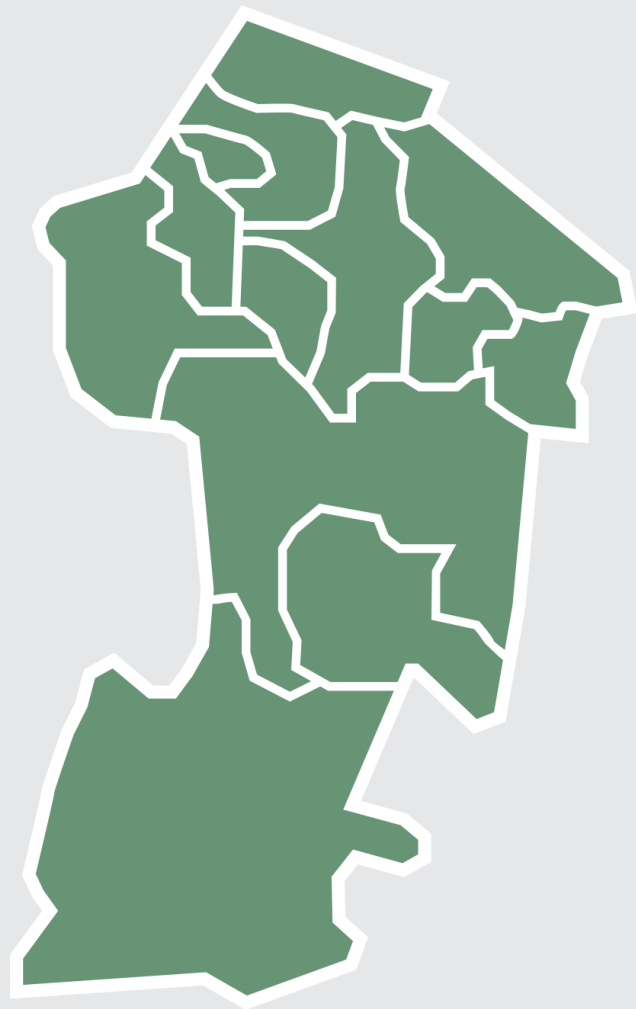
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The 14 municipalities that make up CISVALE play a key role in the collective resource optimization.

**TOTALIZING A POPULATION OF MORE THAN
343 THOUSANDS HABITANTS**

Boqueirão do Leão, Candelária, Gramado Xavier, Herveiras, Mato Leitão, Pantano Grande, Passo do Sobrado, Rio Pardo, Santa Cruz do Sul, Sinimbu, Vale do Sol, Vale Verde, Venâncio Aires e Vera Cruz.



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MUNICÍPIO DE VENÂNCIO AIRES

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FOUNDATION: 11 de maio de 1891

TERRITORIAL EXTENSION: 773,2 Km²

POPULATION: 70.481 habitantes*

URBAN POPULATION: 63%

DEMOGRAPHIC DENSITY: 85 habitantes/Km²

DISTRICTS: Sede, Mariante, Deodoro, Santa Emília, Centro Linha Brasil, Palanque, Linha Arlindo, Vale do Sampaio, Estância Nova

Source: Demographic Census 2010
*Estimation IBGE 2017

PIB: 1.724.270 – Thousand Reais

PIB per capita: R\$ 26.139

Source: IBGE Cities



MAIN DISTANCES:

- Porto Alegre | **130 km**
- Santa Cruz do Sul | **30 km**
- Lajeado | **30 km**
- Santa Maria | **171 km**
- Caxias do Sul | **137 km**





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LED - Illumination

(PPPs – Public-Private Partnership)

- Improvements
- Maintenance
- Control Management





WASTE Recycling

- Waste separation solution and Recycling;
- Solution of use and transformation in energy and construction materials;
- CISVALE: 14 municipalities totaling an average of **154.350 kg / day** of garbage.



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PHOTOVOLTAICS

Venâncio Aires

First Brazilian municipality with a project at Getúlio Vargas Foundation registered at Banco do Brasil.



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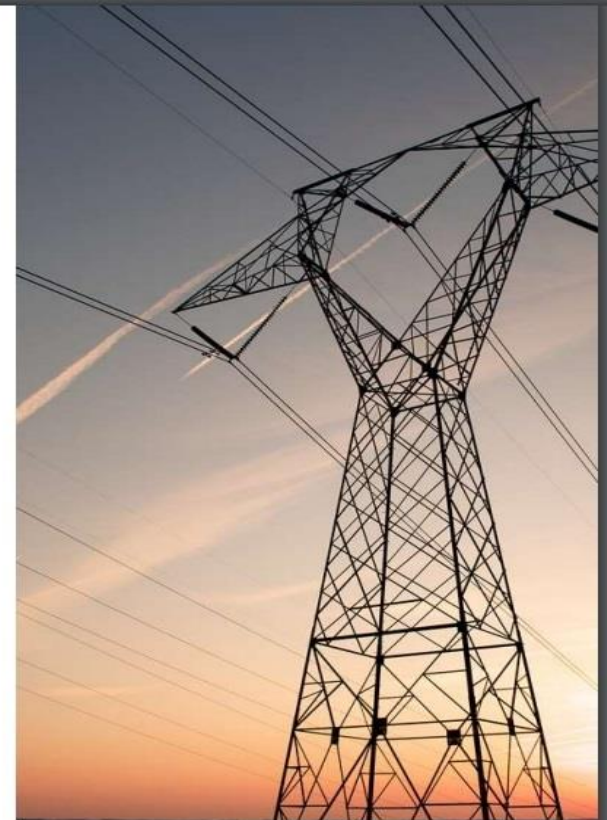
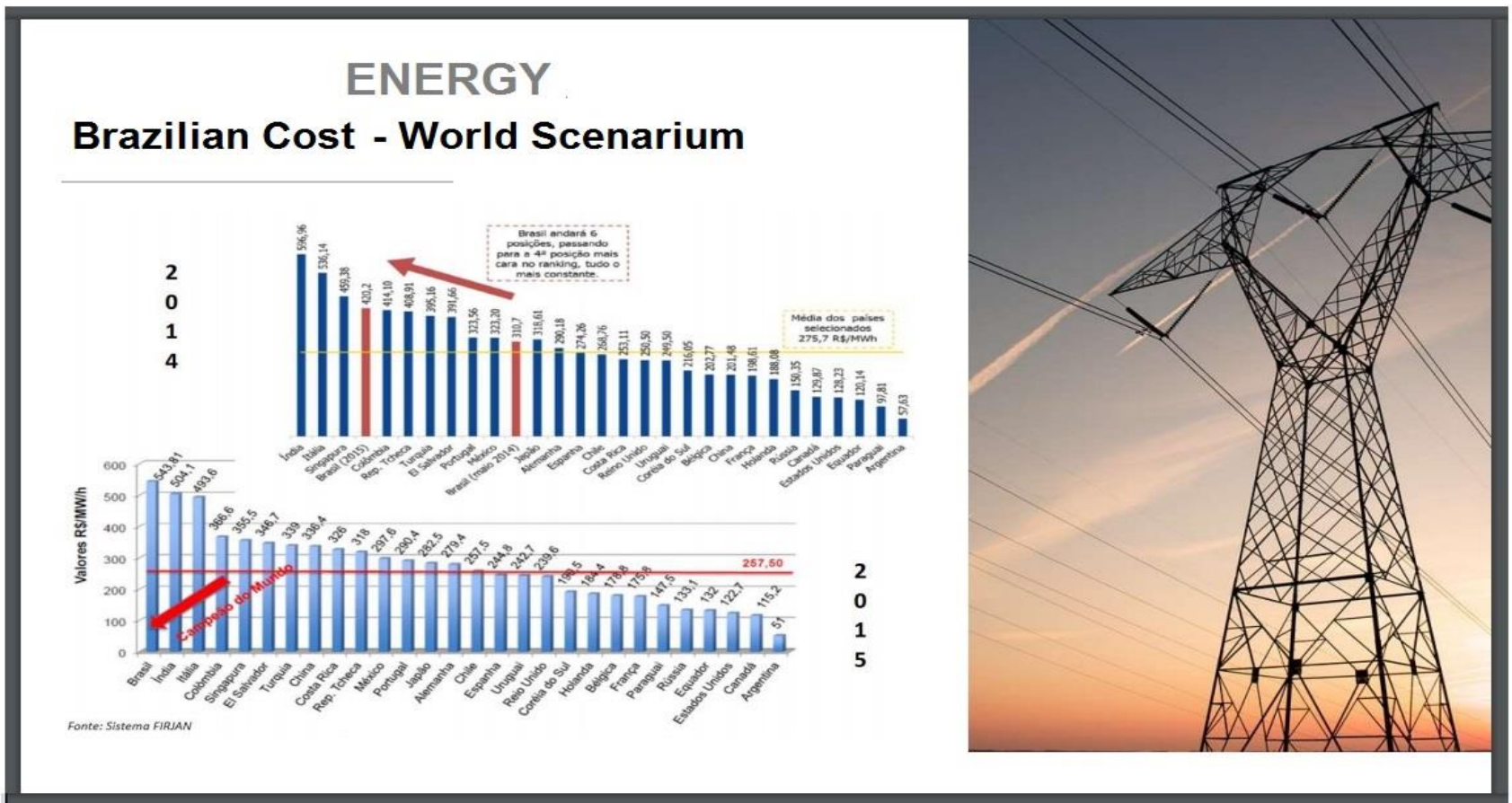
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ENERGY

BRAZILIAN COST – WORLD SCENARIUM



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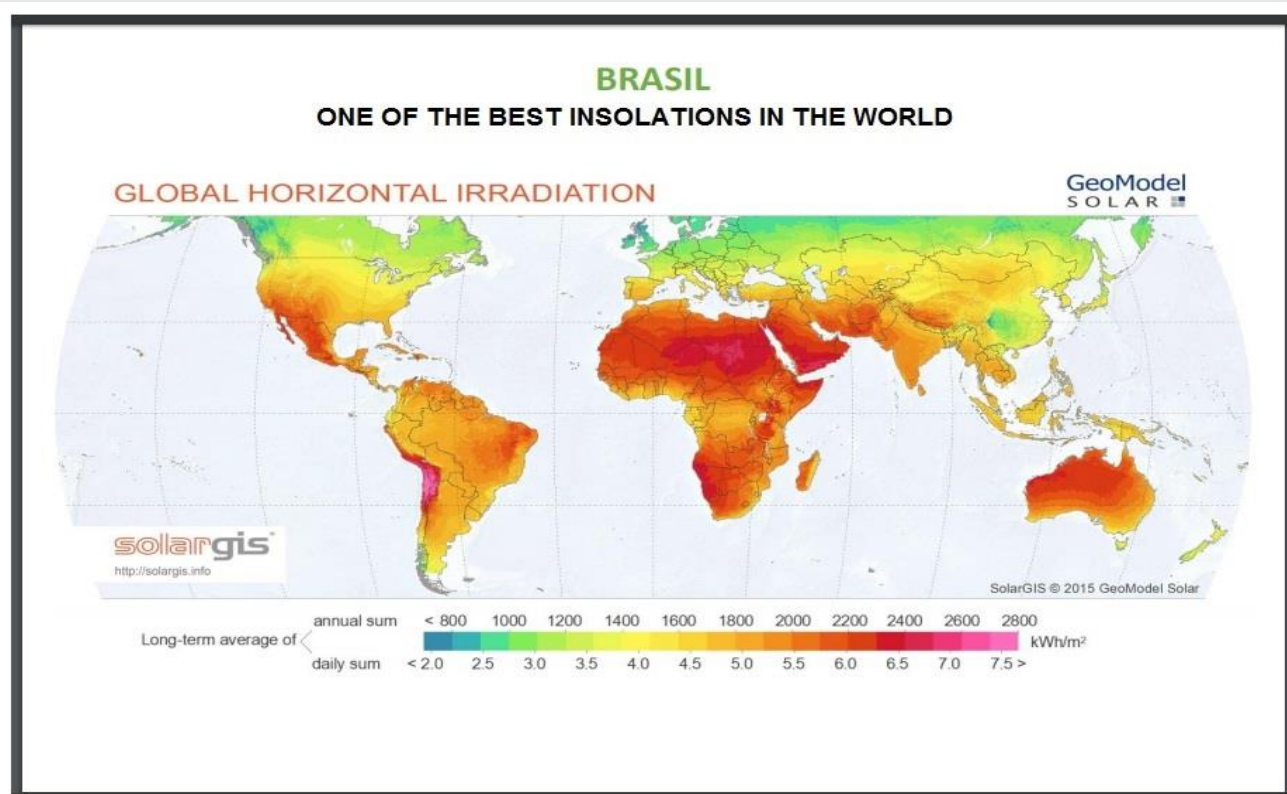
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BRAZIL

ONE OF THE BEST INSOLATIONS IN THE WORLD



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EVOLUTION OF PV INSTALLATIONS

NEW WORLD REALITY

TABLE 1: TOP 10 COUNTRIES FOR INSTALLATIONS AND TOTAL INSTALLED CAPACITY IN 2016

TOP 10 COUNTRIES IN 2016 FOR ANNUAL INSTALLED CAPACITY				TOP 10 COUNTRIES IN 2016 FOR CUMULATIVE INSTALLED CAPACITY			
1		China	34,5 GW	1		China	78,1 GW
2		USA	14,7 GW	2		Japan	42,8 GW
3		Japan	8,6 GW	3		Germany	41,2 GW
4		India	4 GW	4		USA	40,3 GW
5		UK	2 GW	5		Italy	19,3 GW
6		Germany	1,5 GW	6		UK	11,6 GW
7		Korea	0,9 GW	7		India	9 GW
8		Australia	0,8 GW	8		France	7,1 GW
9		Philippines	0,8 GW	9		Australia	5,9 GW
10		Chile	0,7 GW	10		Spain	5,5 GW

FIGURE 2: EVOLUTION OF PV INSTALLATIONS (GW-DC)

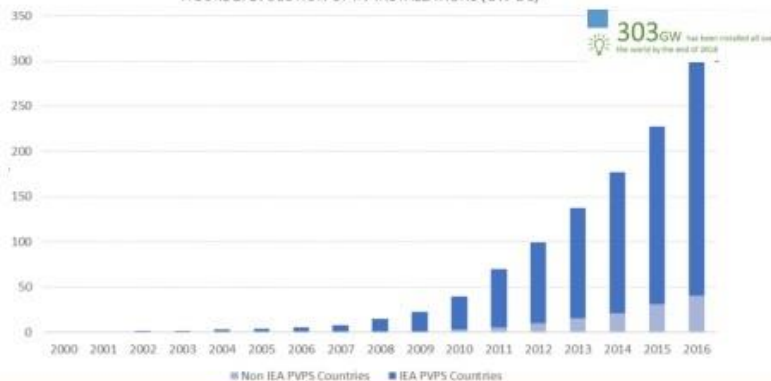


TABLE 2: ANNUAL AND CUMULATIVE INSTALLED PV POWER 2016

PVPS Countries	ANNUAL INSTALLED CAPACITY	CUMULATIVE INSTALLED CAPACITY
1 China	34.54 GW	78.07 GW
2 USA	14.73 GW	40.3 GW
3 Japan	8.6 GW	42.75 GW Est.
4 India	3.97 GW	9.01 GW Est.
5 UK	1.97 GW	11.63 GW Est.
6 Germany	1.52 GW	41.22 GW
7 Korea	0.85 GW	4.35 GW Est.
8 Australia	839 MW	5.9 GW
9 Philippines	756 MW	0.9 GW
10 Chile	746 MW	1.61 GW
Thailand	726 MW	2.15 GW
Turkey	584 MW	832 MW
France	559 MW	7.13 GW
South Africa	536 MW	1450 MW
Netherlands	525 MW	2.1 MW
Italy	373 MW	19279 MW
Switzerland	250 MW	1640 MW
Canada	200 MW	2715 MW
Belgium	170 MW	3422 MW
Austria	154 MW	1077 MW
Mexico	150 MW	320 MW
Israel	130 MW	0.91 GW
Denmark	70 MW	0.9 GW
Sweden	60 MW	175 MW
Portugal	58 MW	513 MW
Spain	55 MW	5.49 GW
Malaysia	54 MW	286 MW
Norway	11 MW	26.7 MW
Finland	10 MW	15 MW



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SMART CITIES



- Public Transportation and
- Citizen's Security



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Korea Mission- August/2017



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BUSSINES OPPORTUNITIES

Import Technologies;

Import Products;

**Investments of Korean Companies in
South Brazil - CISVALE;**

Exchange Experiences.



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PARTNERSHIPS:

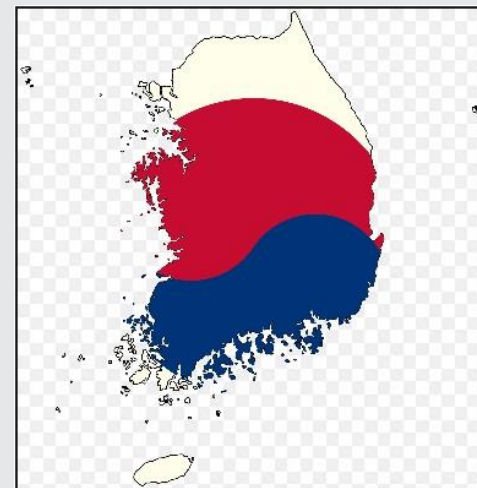
KAIST – Korea Advanced Institute of Science and Technology





**Brazil
and
Korea**

**Daedanhi
Kamsahamnida**



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