

# SCENARIO ROOM PROJECT TO SUPPORT EIA IN SAO PAULO STATE - BRAZIL

ROMITELLI, M.S.

SILVA, R.F.

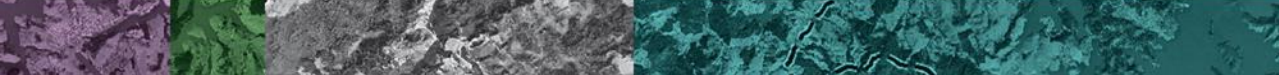
TRAVALINI, V.

Directorate of Environmental Impact  
Assessment

CETESB - Environmental Agency of São  
Paulo State - Brazil



April/2015



# BACKGROUND



Construction and Operation of large projects in Brazil



require environmental licenses (permits)

- preliminary
- installation
- operation



In São Paulo State issued by CETESB



Airports



Highways



Mining



Residential Complex



Power transmission lines



Landfill



Logistics Terminals



Pipelines



Metropolitan Transportation



Railways



Hydropower



Agrobusiness



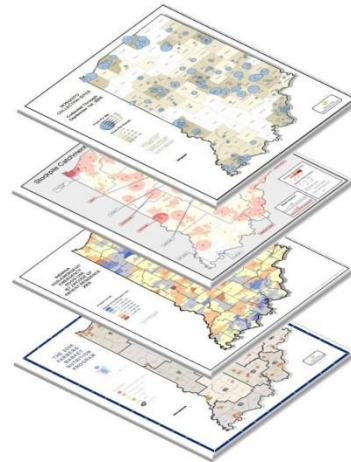
Industries



Powerplant

# BACKGROUND

- Preparation and review of EIA reports:
  - demand and generate a lot of information (fields surveys, monitoring, mapping, modelling, etc.)

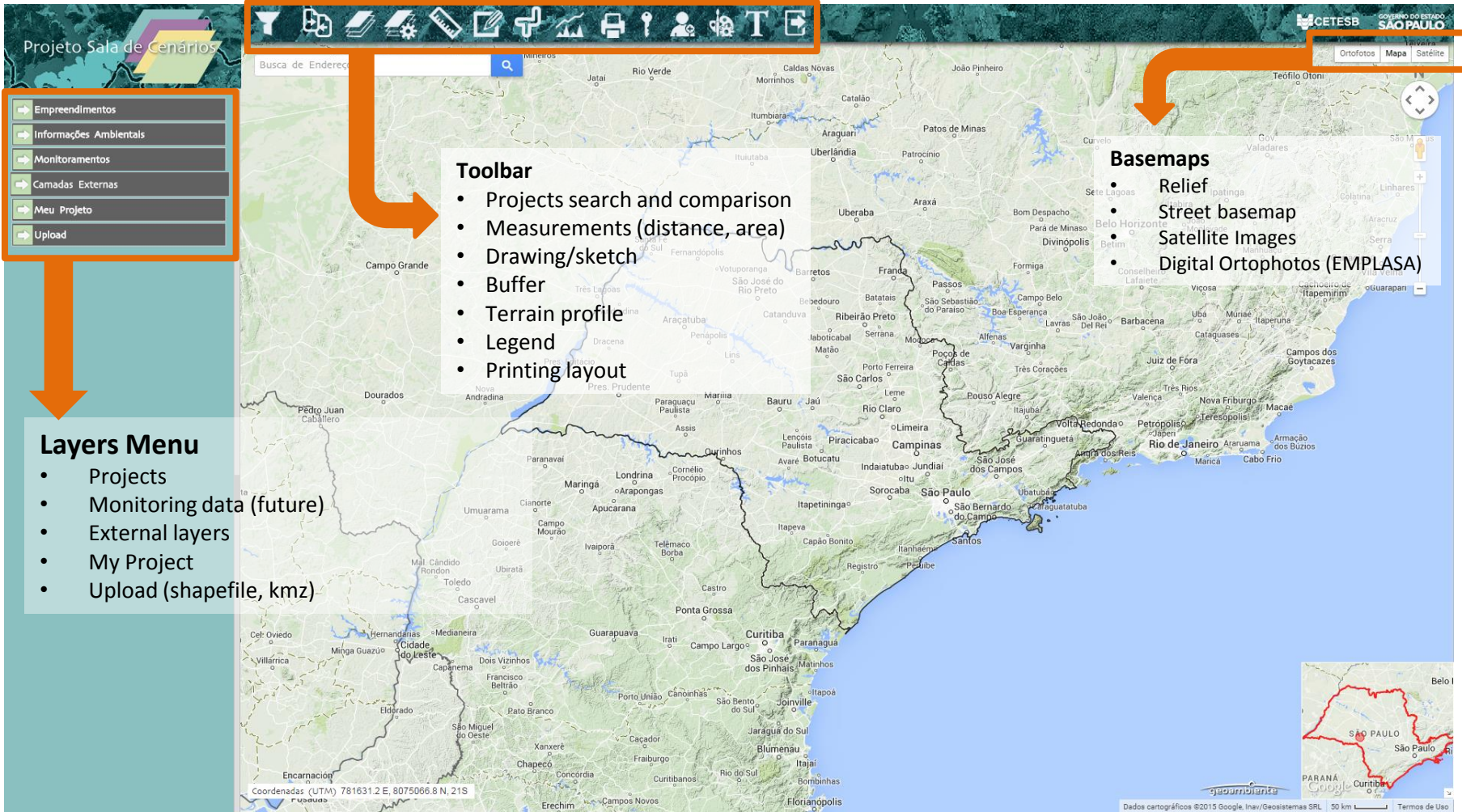


# SCENARIO ROOM PROJECT

- Goals:
  - facilitate access, allows quicker and deeper EIA review, uses previous acquired information
- Scenarios Room Project:
  - GEO Solution + DOC Solution (Content Management) + Modeling
- GEO Solution is basically a Geoportal



# GEOPORTAL

**Projeto Sala de Cenários**

Busca de Endereço

**Toolbar**

- Projects search and comparison
- Measurements (distance, area)
- Drawing/sketch
- Buffer
- Terrain profile
- Legend
- Printing layout

**Basemaps**

- Relief
- Street basemap
- Satellite Images
- Digital Orthophotos (EMPLASA)

**Layers Menu**

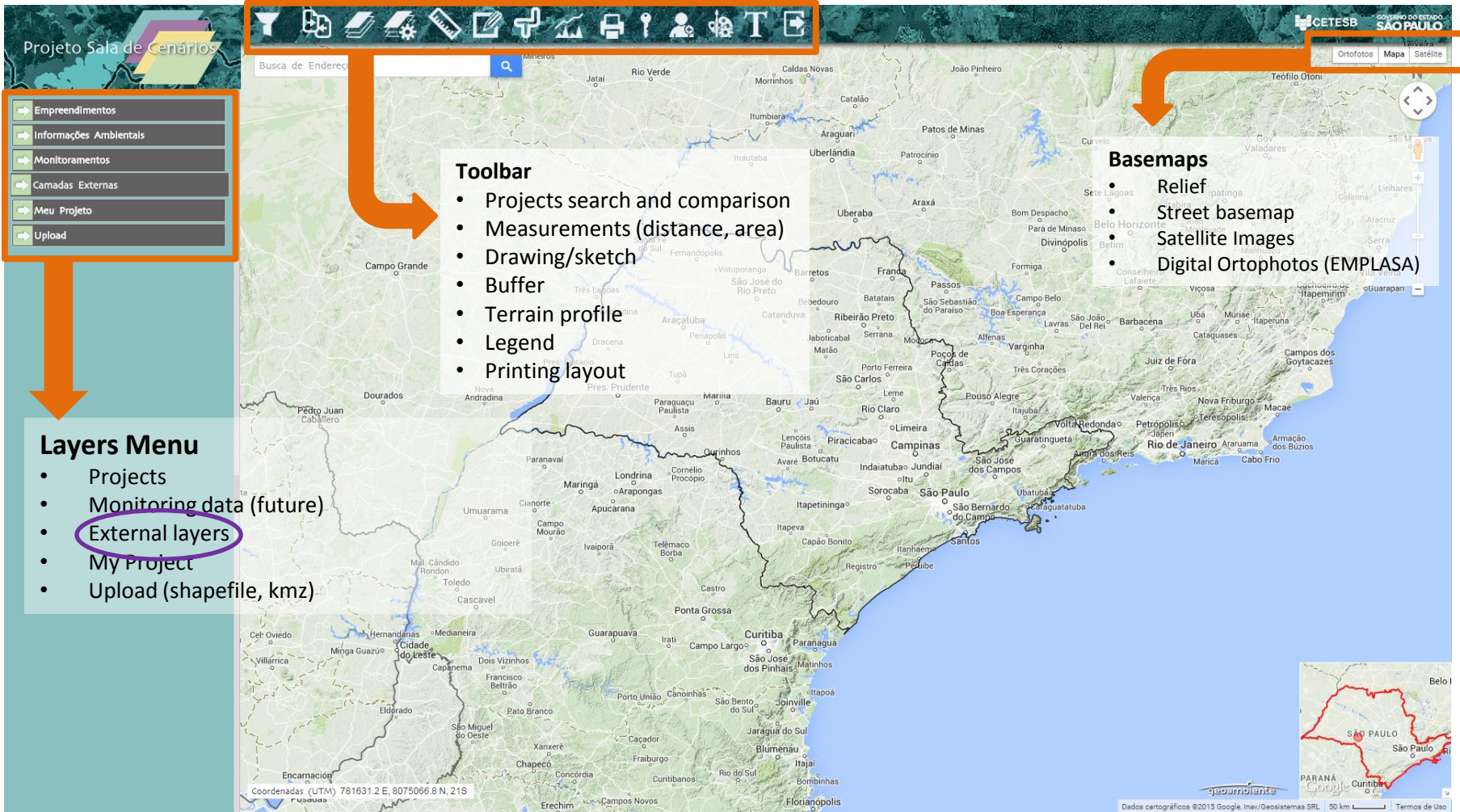
- Projects
- Monitoring data (future)
- External layers
- My Project
- Upload (shapefile, kmz)

Ortofotos Mapa Satélite

Coordenadas (UTM) 781631.2 E, 8075066.8 N, 21S

Dados cartográficos ©2015 Google, Ina/Geosistemas SRL 50 km

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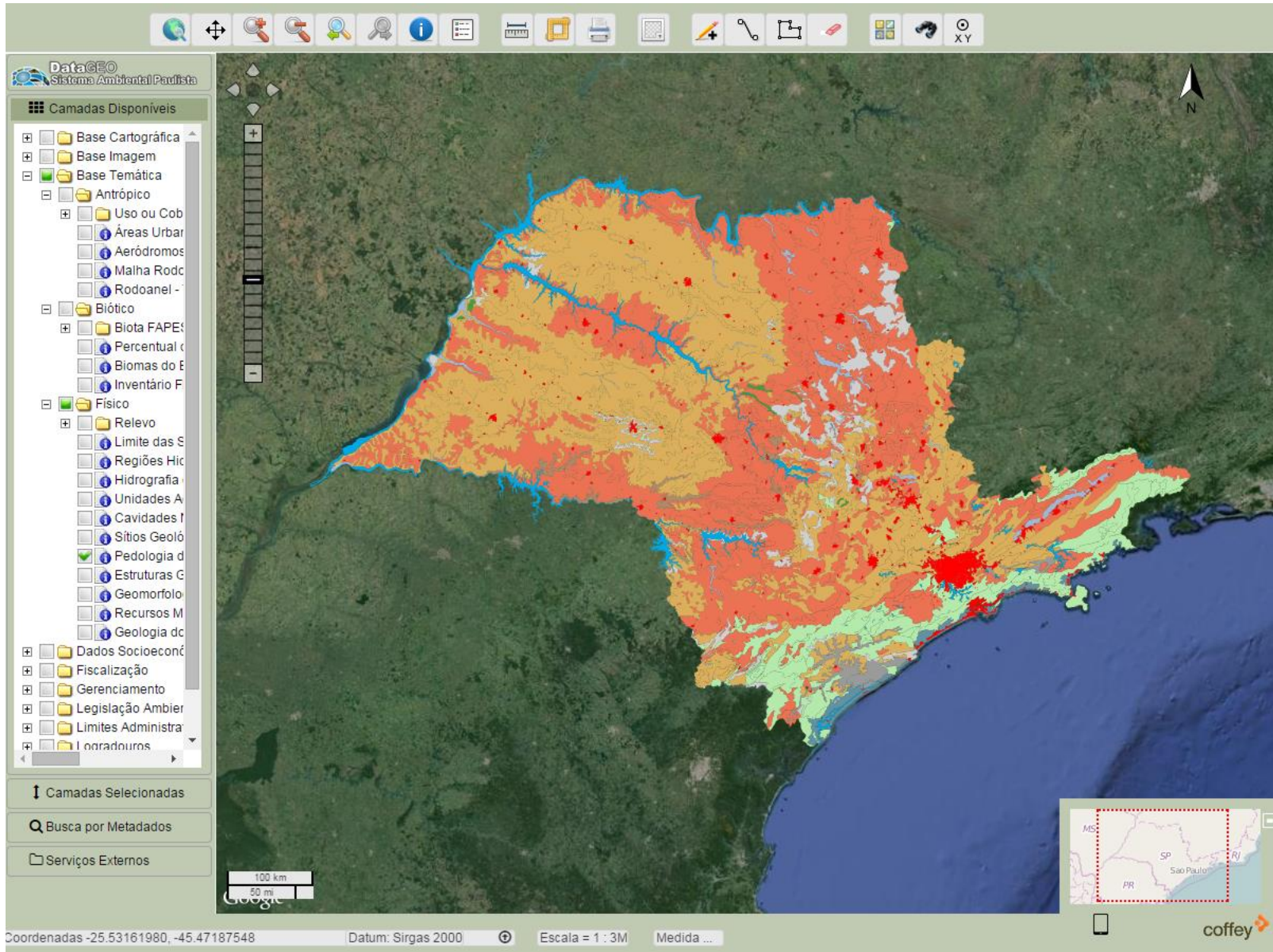
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# DATA GEO



**Camadas Disponíveis**

- Base Cartográfica
- Base Imagem
- Base Temática
  - Antrópico
    - Usos ou Cob
    - Áreas Urbanas
    - Aeródromos
    - Malha Rodoviária
    - Rodovias
  - Biótico
    - Biota FAPESP
    - Percentual de Cobertura Vegetal
    - Biotomas do Estado
    - Inventário de Espécies
  - Físico
    - Relevo
    - Limite das Serpentes
    - Regiões Hidrográficas
    - Hidrografia
    - Unidades Ambientais
    - Cavidades Iatéricas
    - Sítios Geológicos
    - Pedologia de Referência
    - Estruturas Geológicas
    - Geomorfologia
    - Recursos Minerais
    - Geologia de Referência
- Dados Socioeconômicos
- Fiscalização
- Gerenciamento
- Legislação Ambiental
- Limites Administrativos
- Litorais

**Camadas Selecionadas**

Busca por Metadados

Serviços Externos

Coordenadas -25.53161980, -45.47187548 | Datum: Sirgas 2000 | Escala = 1 : 3M | Medida ...

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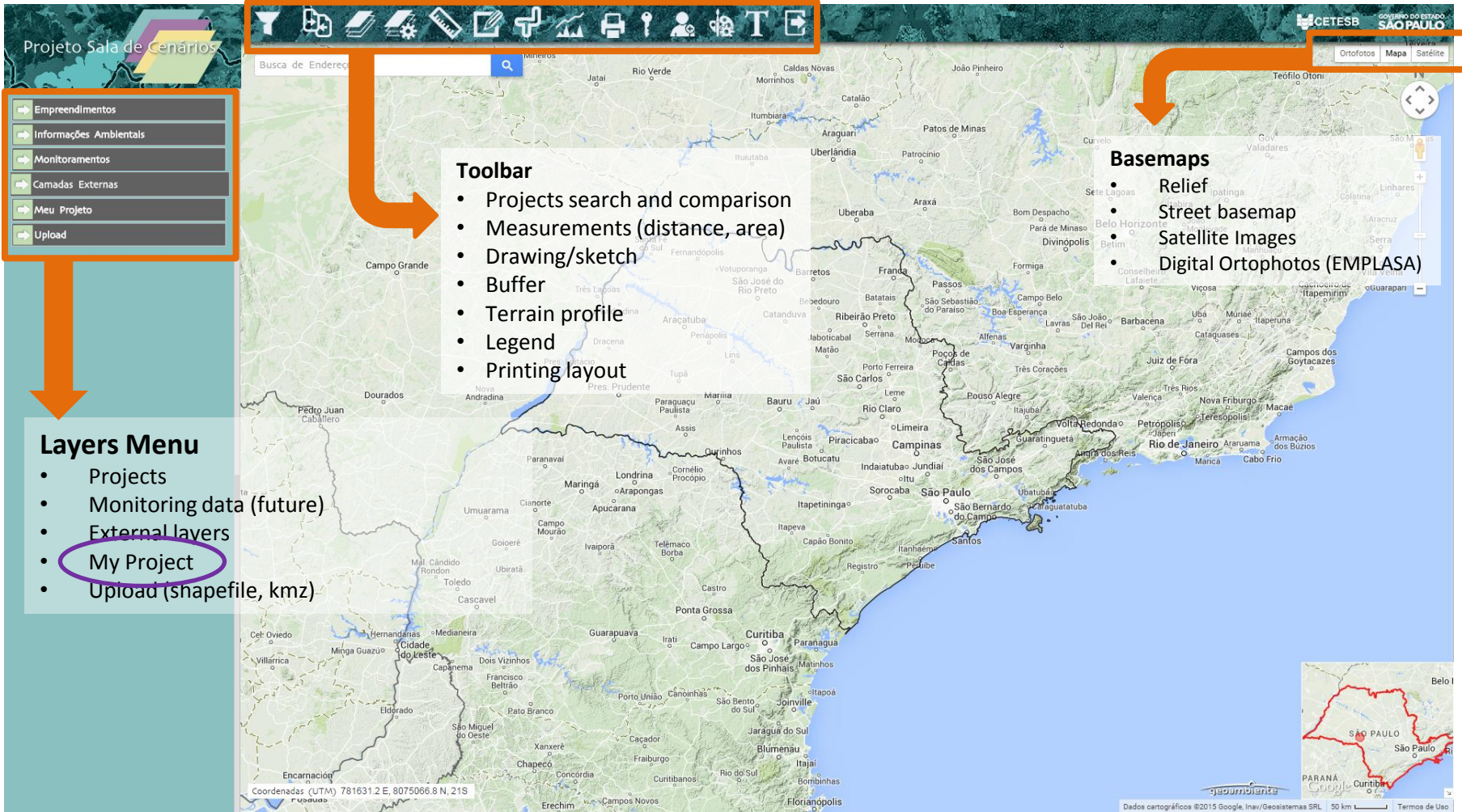
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# MY PROJECT

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## Environmental assessment of a new project

- New project proposal (draw or upload)





# MY PROJECT



## Environmental assessment of a new project

- New project proposal (draw or upload)
- Waterways



# MY PROJECT



## Environmental assessment of a new project

- New project proposal (draw or upload)
- Waterways
- Contours



# MY PROJECT



## Environmental assessment of a new project

- New project proposal (draw or upload)
- Waterways
- Contours
- Forestry

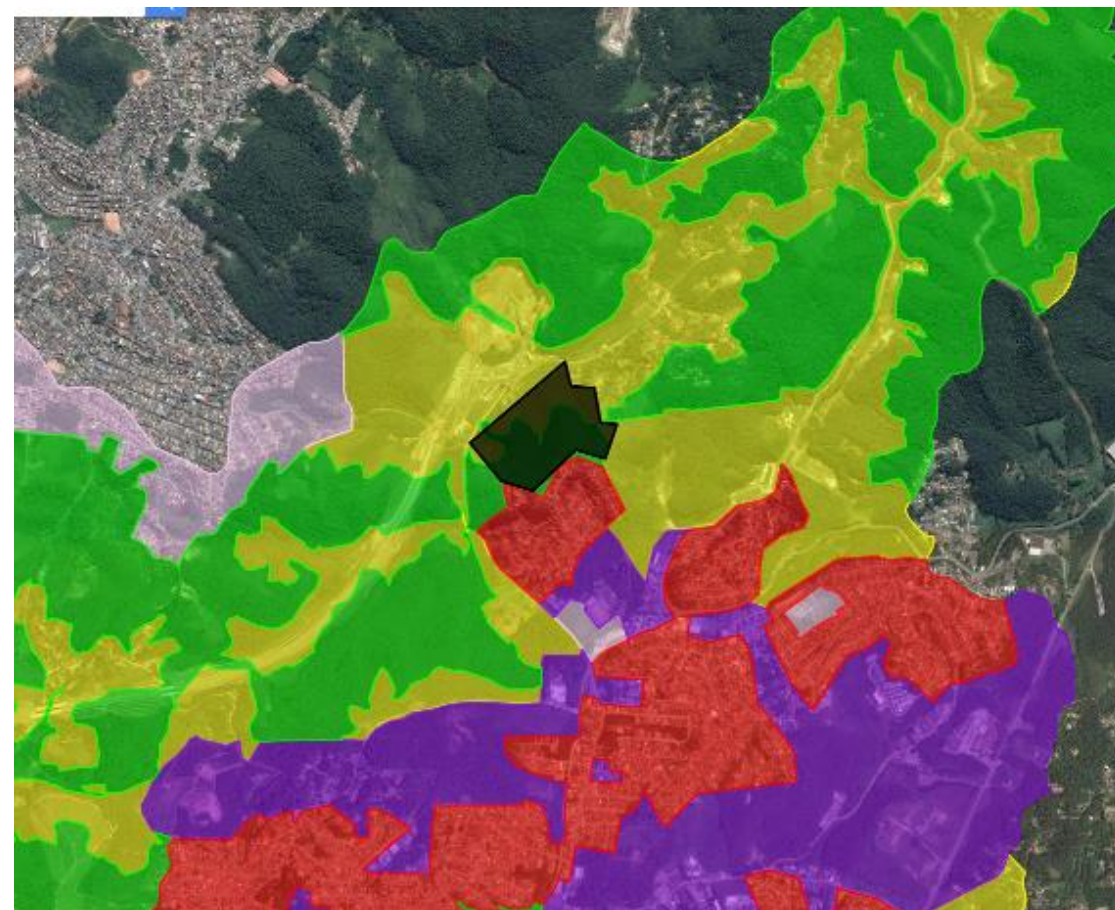


# MY PROJECT



## Environmental assessment of a new project

- New project proposal (draw or upload)
- Waterways
- Contours
- Forestry
- Environmental protected areas



# MY PROJECT



## Environmental assessment of a new project

- New project proposal (draw or upload)
- Waterways
- Contours
- Forestry
- Environmental protected areas
- Other projects on surroundings

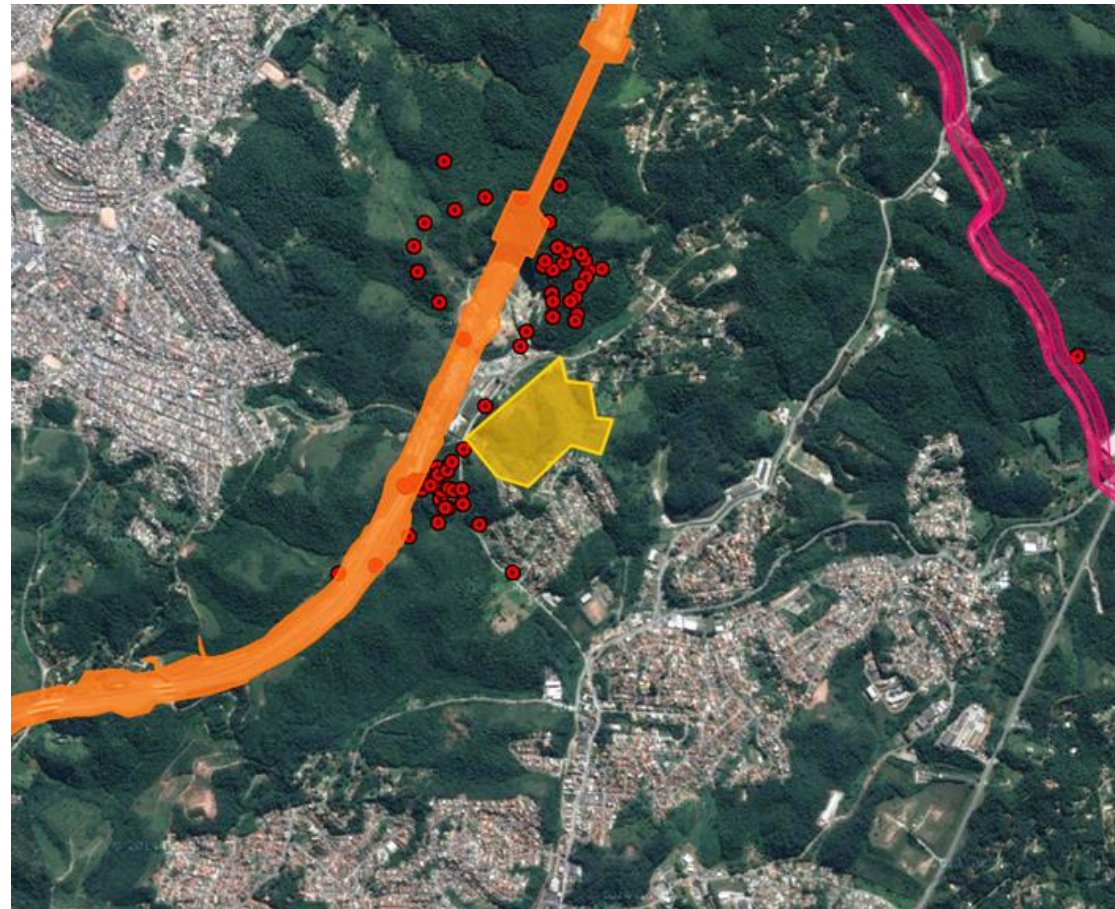


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## Environmental assessment of a new project

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- Contours
- Forestry
- Environmental protected areas
- Other projects on surroundings
- Monitoring data



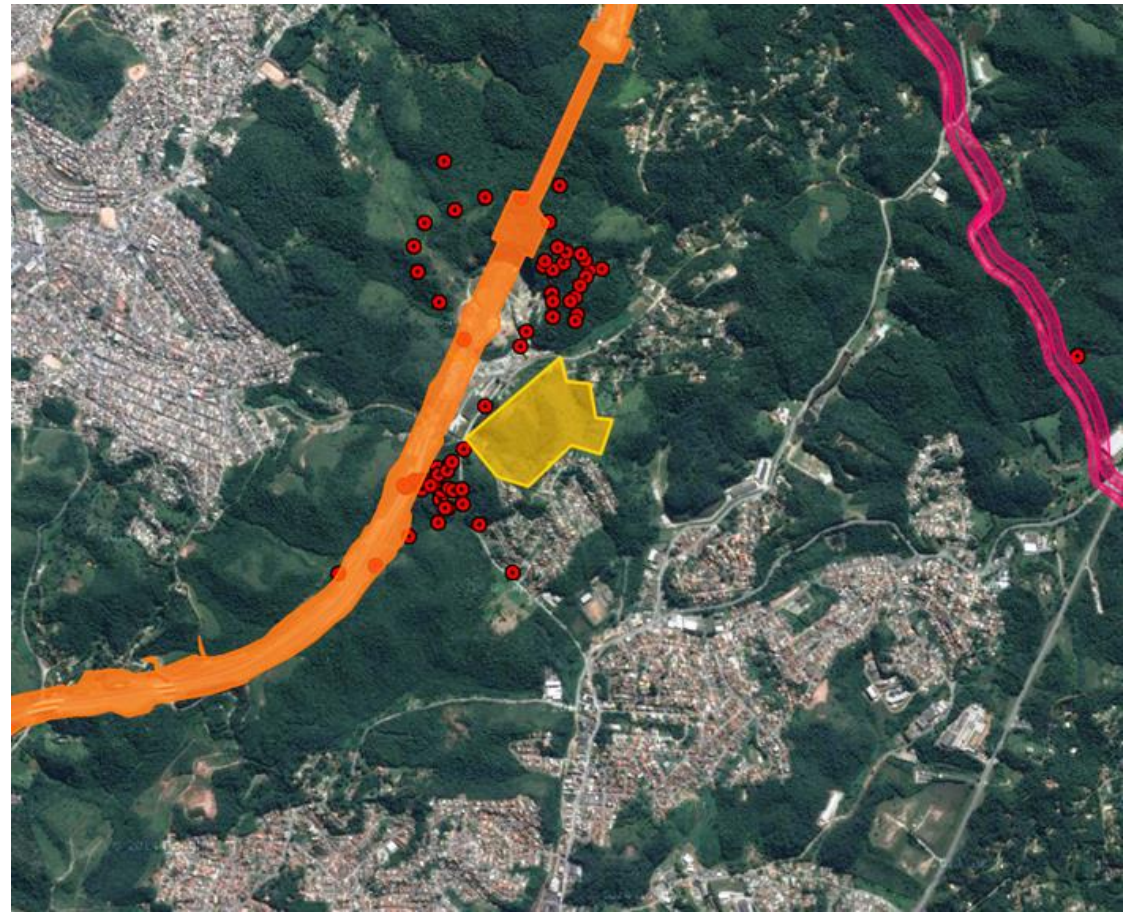


# MY PROJECT



## Environmental assessment of a new project

- New project proposal (draw or upload)
- Waterways
- Contours
- Forestry
- Environmental protected areas
- Other projects on surroundings
- Monitoring data



# PROJECTS DATA

Management information

Projects features

Environmental indicators

Projeto Sala de Cenários

Busca de Endereço

- ROD FRANCISCO A NEGRÃO SP-258
- ROD FRANCISCO A NEGRÃO SP-258
- ROD GERALDO DE BARROS SP-304
- ROD JOÃO LEME DOS SANTOS
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- ROD RAPOSO TAVARES MARGINAL
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- ROD RAPOSO TAVARES SP- 270
- ROD RAPOSO TAVARES SP -270
- ROD RAPOSO TAVARES -SP-270
- ROD RAPOSO TAVARES SP-270
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- ROD SP-249 E SPI-043/249
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- ROD TAMOIOS TRECHO SERRA
- LP - Licença Prévia (25/06/2013)
- EST - Estudo (24/09/2012)
- ROD WALDOMIRO C.CAMARGO SP-0
- RODOANEL OESTE VIAS MARGINAIS
- RODOANEL TRECHO LESTE
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- RODOANEL TRECHO OESTE
- RODOANEL TRECHO SUL
- SIST MOBILIDADE URBANA-SANTOS
- TÚNEL SANTOS-GUARUJÁ
- VIA BANHADO
- VIA MARGINAL ACESSO A TOYOTA
- VIADUTO DE ACESSO PARA BALSAM
- Terminal Logístico
- Unidade Prisional
- Ute/Ure

Coordenadas (UTM) 455189.3 E, 7390753.8 N, 23S

**Project type:** Highway

**Process ID:** 00098/2011

**Proposition:** New project

**Municipalities:** Caraguatatuba, São Sebastião

[Compare projects](#)

[Export CSV](#)



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**Length (km): 22**

**Tunnel length (km): 12**

**Average speed (km/h): 80**

**Number of lanes: 4**

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Coordenadas (UTM) 455189.3 E, 7390753.8 N, 23S

**Construction period (months): 36**

**Earthmoving (m<sup>3</sup>): 13.079.590**

**Vegetation clearing (ha): 18,97**

**Construction labor: 2.120**

**Environmental protected areas: 2**

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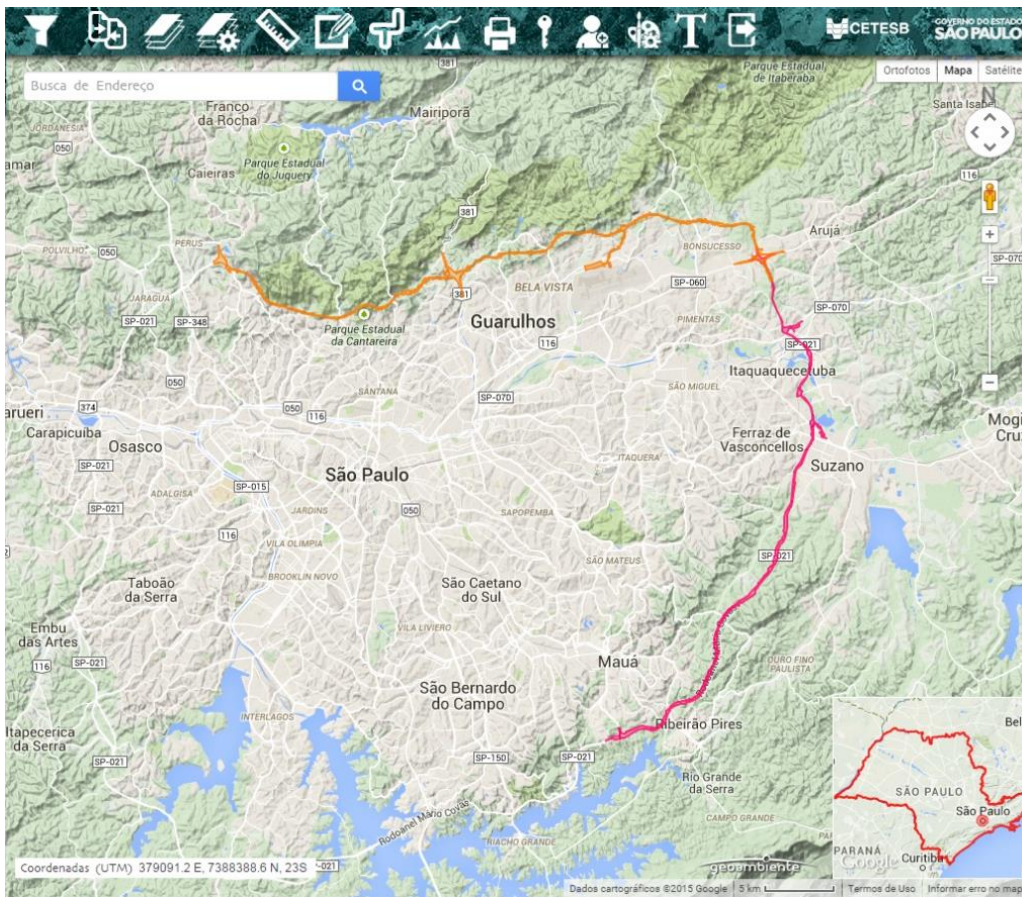
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**Construction labor: 2.120**  
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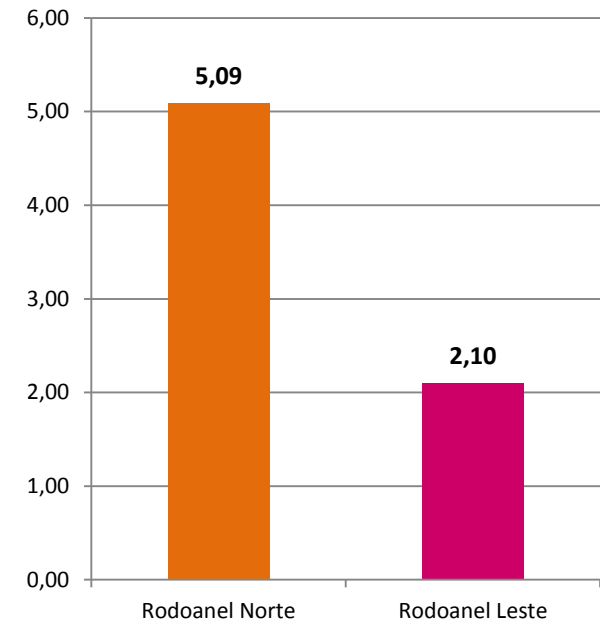


# SIGNIFICANCE OF IMPACTS

Comparing the environmental indicators of two or more projects of the same type (e.g. highways)



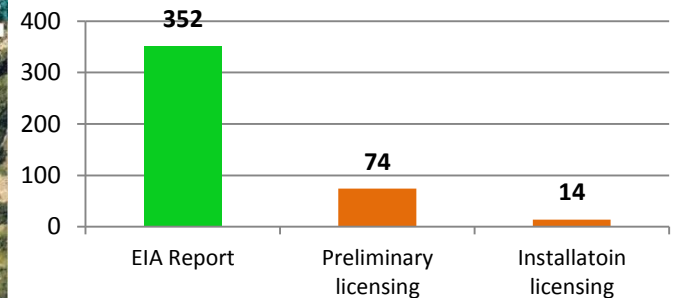
Vegetation clearing per affected area (ha/ha)



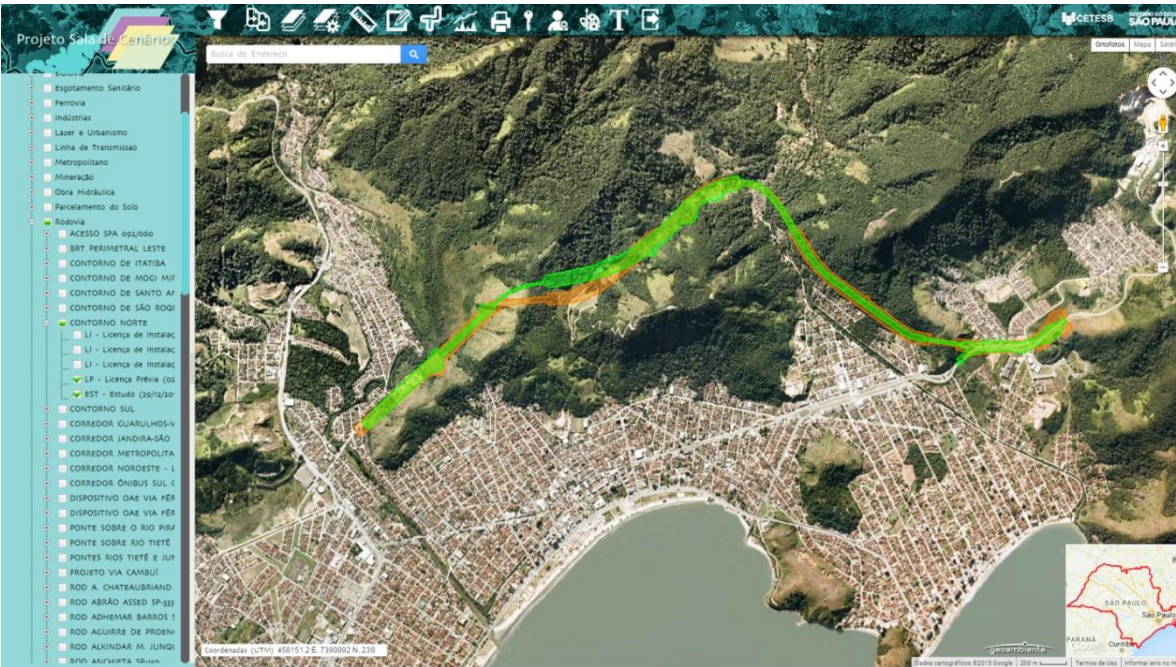
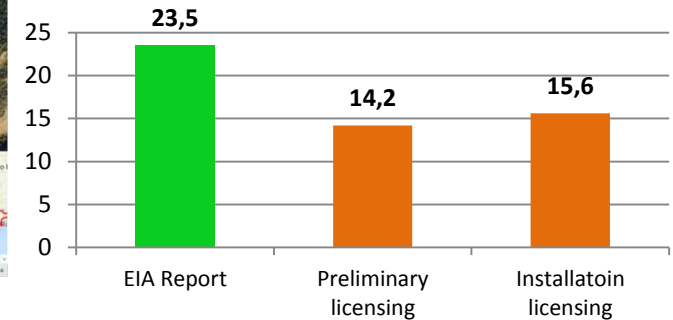
# EFFECTIVENESS OF THE ENVIRONMENTAL LICENSING

Comparing the environmental indicators of the same project, but throughout the various licensing stages (study, preliminary, installation, and operation licenses).

Affected properties

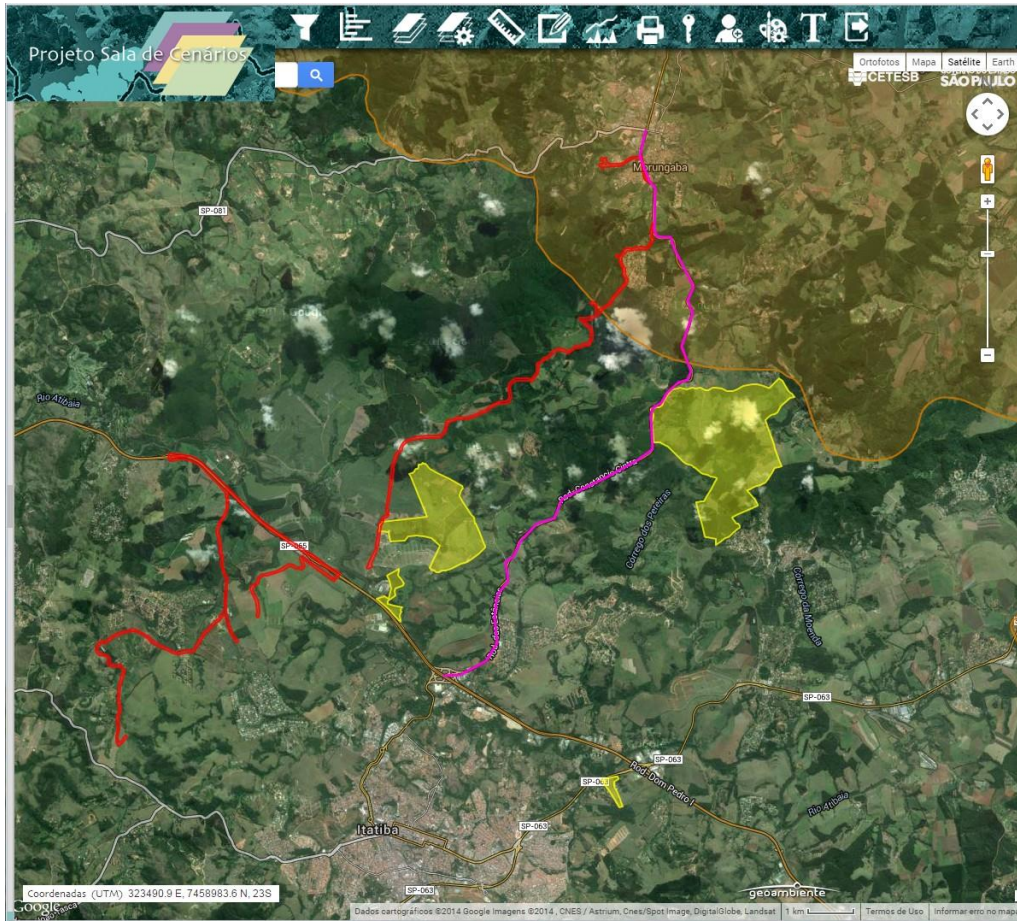


Vegetation Clearing (ha)

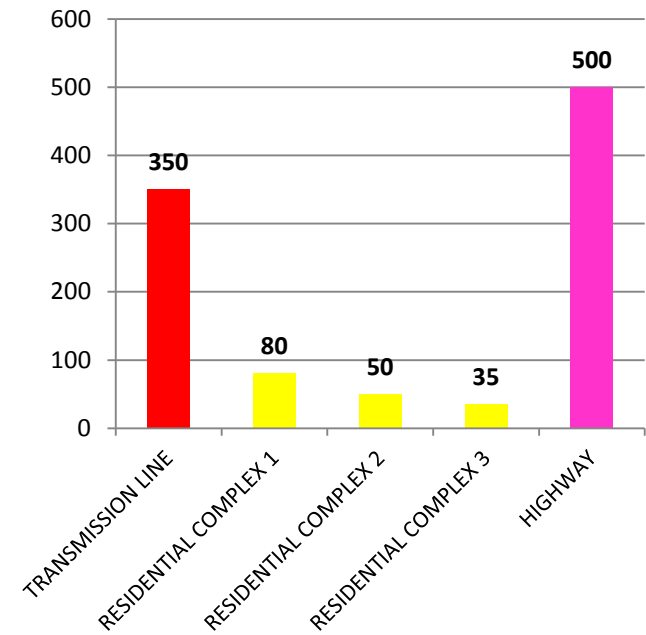


# IMPACTS IN THE SURROUNDINGS / CUMULATIVE?

Comparing the environmental indicators of two or more projects in the same area.



**Construction Labor**



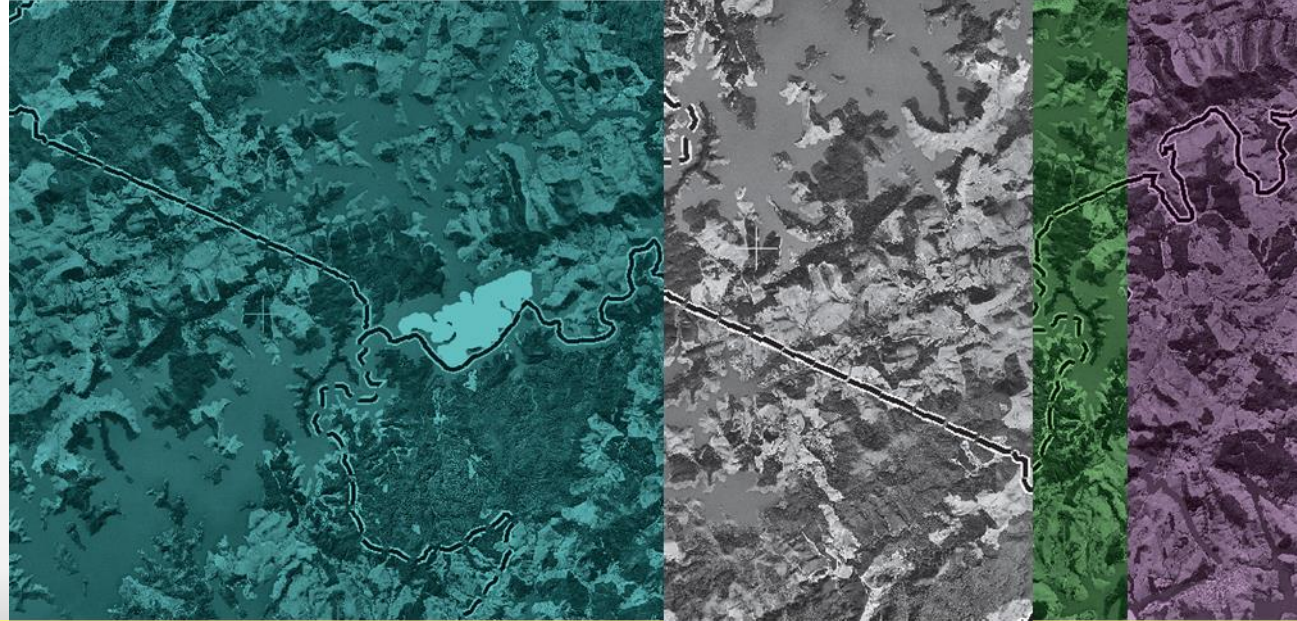
Environmental Protected Areas (Sustainable use)



# FUTURE DEVELOPMENTS

- Feeding the Geoportal in an automatic way;
- Increasing interactions with other institutions licensing Systems;
- Developing more sophisticated environmental analysis tools;
- Using Content Management Solution to improve the Project.





**Thank You!**

Maria Silvia Romitelli

**id\_cetesb@sp.gov.br**

