PMR - Chile:
Insights and Perspectives

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1 Motivation

2 Challenges for a Low carbon economy
   - Strategy approach of a quantitative measures and design
   - DSGE - Macroeconomic Model
   - Integrated model
   - Iterative DSGE - Model Structure

3 Complementary approach and following efforts

4 To do list . . .
Outline

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Emission Profile in Chile - 2006

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Economic Profile

- Emerging economy, GDP growth av. 5.9% last 4 years
- Open market oriented economy
- Anti cyclical Fiscal Policy Rule associated to the trend GDP 5%
- Inflation Targeting 3% in two years horizon.
- Flexible Exchange Rate
- Strong Institutional capabilities
- The main economic activity: Mining - Copper
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Looking for integration mechanism

- Is there any impact in GDP growth rates?
- How carbon pricing instruments would affect sectoral investment expectations?
- How much is the fiscal impact of carbon pricing?
- Is there any requirement on price stabilization?
- What are the net benefits of total and sectoral productivity gains?
- Is there some complementary options with tax instruments?
- How is the dynamic of the economy in the mid term?
Currently work related to MAPS project

- Complementary tool for some modeling experience
  DSGE-Chile

- Constructing some iterative interaction between energy models and macro models

- Understanding dynamic of sectoral main drivers.

- Internalizing co benefits from Total Factor Productivity

- Looking for some exogenous random shocks in terms of trade
DSGE-Model Structure

Institutions: the way they interact

Figure: Own interpretation following Medina and Soto 2006
Extended DSGE-Model Structure

Government
- Central Bank
- Fiscal Budget

Households
- M(j)
- L(w)

Firms
- Copper
- Net taxes
- Capital goods (p)

Assembly firms
- Intermediate goods (p)
- Copper revenues

External sector
- X, M, B*
- Capital goods K(z)

Energy Sector
- Transfers
- G

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Sectoral data and economic structure requirements

- MRV system implementation
- Industrial survey data collection
- Diagnostic and market structure in three main activities; Electric generation, Industries and others
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Sectoral Modeling complementation

1. Estimation of price elasticity of GHG emission and carbon price
2. Dynamics of investment of new technologies
3. Preliminary analysis for core elements:
   1. Goals and market structure
   2. Sector coverage and gases
   3. Linking with international GHG markets
4. Acknowledge sectoral heterogeneity
Thank you very much...