OECD GGSD Forum

A Recent Energy Tax Reform in Korea: Introducing a Coal Tax on Power Generation

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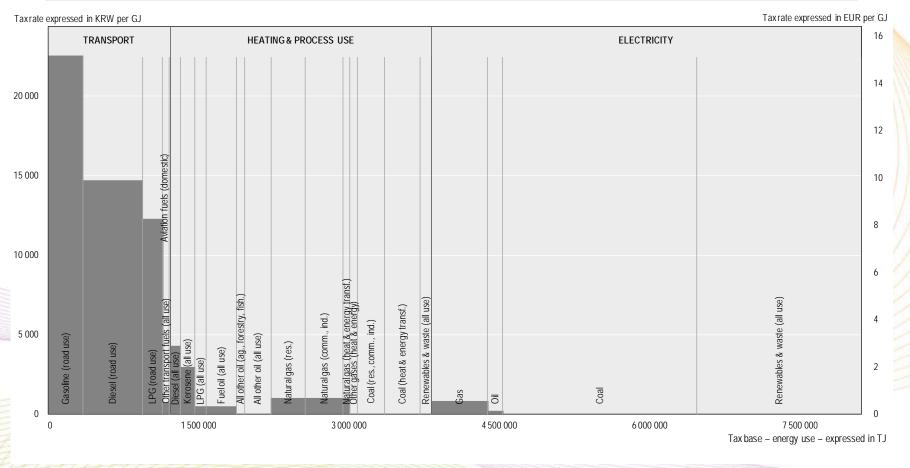
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Background

- Necessity to control the demand for electricity
 - Excessive electrification due to low electricity price, e.g., agricultural and industrial heating
 - Constrained supply due to nuclear safety scandals (reactor closures) and grid construction conflicts
 - Demand management by taxes and prices
 No taxes on two main power sources such as coal and nuclear power
 - Reducing taxes on alternative energy sources

Energy Taxation in Korea on an energy content (TJ) basis Source: OECD (2013) "Taxing Energy Use" Figure 19.1



Fuel tax credit or tax expenditure

🔲 Tax

Initial Plan

- Adjust the relative prices of energy sources by
 - Imposing an excise tax on coal for power generation: standard rate 30 KRW/kg reduced 21 KRW/kg
 - ➢ Reducing excise tax rates for energy sources alternative to electricity: LNG 60 KRW/kg → 42 KRW/kg, Kerosene 104 KRW/kg → 72 KRW/kg,
 Propane 20 KRW/kg → 14 KRW/kg
 - Increasing consumer prices of electricity on average by 5.4%

Final Outcome

- Coal tax
 - Standard rate 24 KRW/kg
 - Reduced rates 19 KRW/kg for coal with NCV above 5000 kcal/kg, 17 KRW/kg below 5000 kcal/kg
 - NCV = Net Calorific Value

Policy Effects

- Demand management: decreasing the peak demand for electricity by 0.8 GW (cf. typical nuclear reactor 1 GW)
- Inflation: increasing consumer price index by 0.056%p
- Net revenue: 830 billion KRW
 - Spending programs: energy voucher 200 billion KRW
 - Energy efficiency subsidy 300 billion KRW
 - Subsidy to local governments 330 billion KRW

Thank You