

# Research in Sustainable Energy Economics

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[Greenpeace Video on Sustainable Energy.mp4](#)

# Presentation Plan

- Motivation
- Research areas
- Papers and proposals in different research areas

# Motivations

To undertake meaningful academic and professional research in the field of energy economics which would ultimately lead to delivering key sustainability principles in regional, national and international levels. Pure data driven analytical studies based on recent quantitative research underpinnings strengthen sustainable energy planning to ensure community involvement, inter-generational equity, biological diversity, ecological integrity, and precautionary social and environmental investment.

# Research Areas

- Energy Conservation
- Renewable Energy
- Sustainable Mining Community
- Oil Price Volatility

# Energy Conservation

- (a) Rafiq, S. and Salim, Ruhul A. 2010, 'The Linkage between energy consumption and income: A multivariate cointegration analysis in developing economies,' *International Journal of Emerging Markets*, forthcoming.
- (b) Rafiq, S. and Salim, Ruhul A. 2009. 'Temporal causality between energy consumption and income in six Asian emerging countries,' *Applied Economics Quarterly*, Vol. 55, no. 4, 335-350.

Objective:

- Identifying energy conservation possibilities in emerging economies by implementing a multivariate demand side time series econometric analysis.

- (c) Rafiq, S., Salim, Ruhul A. and Bloch, H. 2010, 'Relationship between oil consumption and economic growth: Is there any energy conservation possibility for China?'  
Submitted in: *Energy Economics*.

Objective:

- Identifying energy conservation possibilities in China by implementing an extensive multivariate supply and demand side time series econometric analysis.

# Renewable Energy

(a) Rafiq, S., and Alam, K. A. 2010, 'Why are some emerging economies proactively accelerating the adoption of renewable energy?' Submitted in: *Energy Policy*;

Objective:

Analysing the determinants of renewable energy consumption in six major renewable energy investor emerging economies within a *demand-side* framework.

(b) Rafiq, S., and Alam, K. A. 2010, 'Climate regulation and renewable energy policy: An economic perspective for Australia,' in book titled, '*The dynamics of climate scepticism on governance and policy.*' Editor: Dr. Tim Cadman.

Objective:

Outlining Australia's short and long-term response to climate change and the state of the RE potentials and challenges to meet the goal of GHG emissions.

# Renewable Energy *cont.*

(c) Rafiq, S. 'Analyzing Australia's renewable energy consumption demand and efficiency: A comparative study for greater sustainability.' Work in progress funded by ECR grant of USQ.

## Objectives:

- Identifying the drivers behind renewable energy consumption demand in Australia and comparing their short-run and long-run elasticities with those of G7 countries;
- Investigating the impact of renewable energy consumption on economic and environmental sustainability of Australia and other studied countries by identifying short-run and long-run causality direction from renewable energy consumption to output and carbon emission;
- Identifying the countries where renewable energy is significantly contributing in economic development and emission.

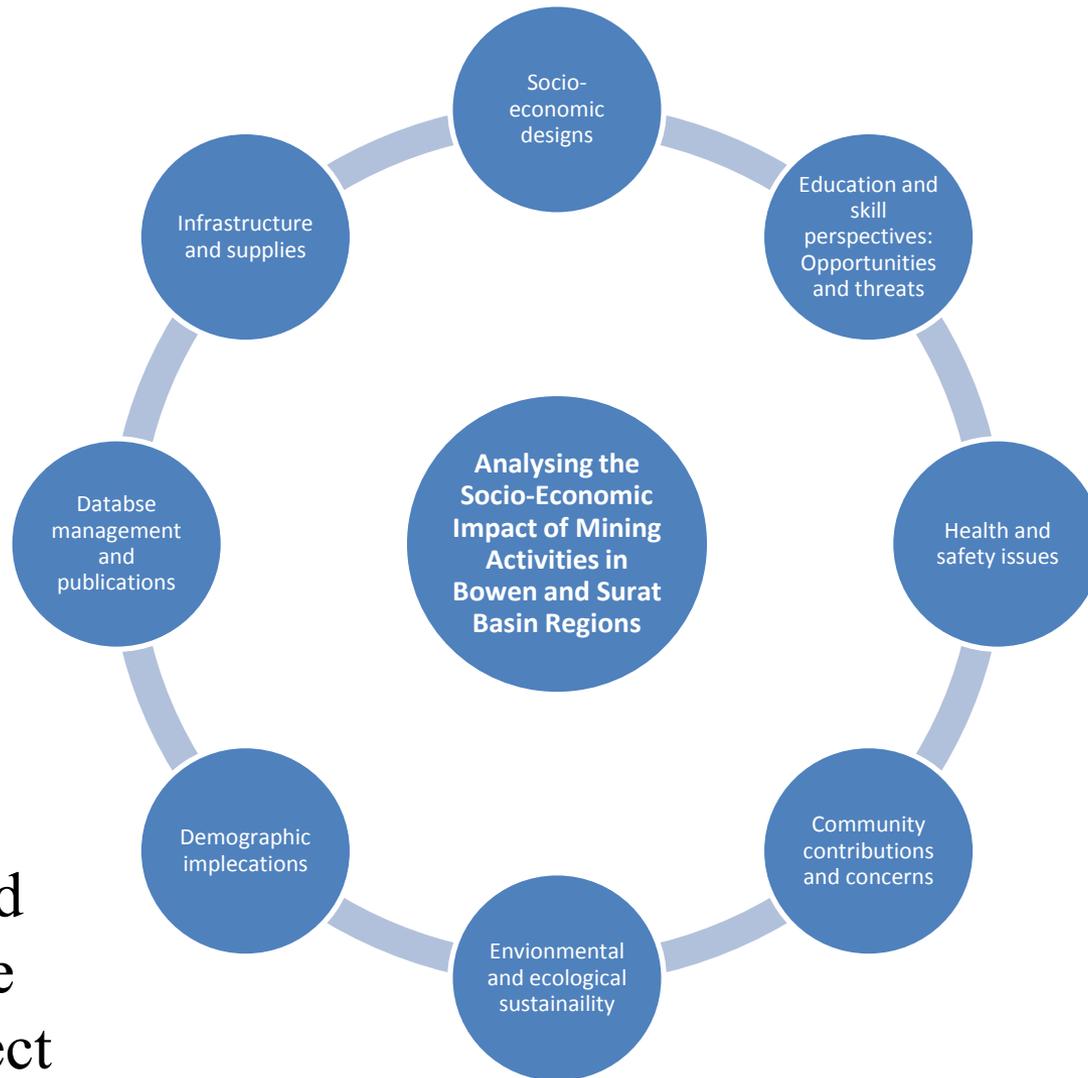
# Sustainable Mining Communities

- (a) Scoping Paper on, 'Analysing the socio economic impact of mining activities in Bowen and Surat Basin Regions- A time-series and cross sectional analysis with a longitudinal perspective.'

## Objectives:

- Identifying the socio-economic impacts of mining activities in Bowen and Surat basin regions;
- Comparing the socio-economic implications between the regions;
- Devising possible policies for developing and restoring greater sustainable mining communities in these regions.

# Sustainable Mining Communities *Cont.*



The systems approach and scopes of the overall project performance.

# Sustainable Mining Communities

(b) Proposal on, 'Developing socio-economic, demographic and behavioural profile of the mining communities based on their perception of mining activities in Surat and Bowen Basin Regions.'

## Objectives:

- Segmenting mining communities based on their perception and involvement in mining activities;
- Developing socio-economic, demographic and behavioural pattern of the segmented communities;
- Proposing possible strategies to enhance positive perception and greater involvement in mining across different mining communities.

# Oil Price Volatility

- (a) Rafiq, S. and Bloch, H., 'Impact of crude-oil price volatility on six Asian economies,' Submitted in: Resources Policy.

## Objective:

Analysing the impact of oil price volatility in six emerging Asian economies namely, China, India, Indonesia, Malaysia, Philippines, and Thailand. This study also focuses on the long term sustainability of these economies in light of increasing oil price volatility and subsidization.

Thank You Very Much!!!!