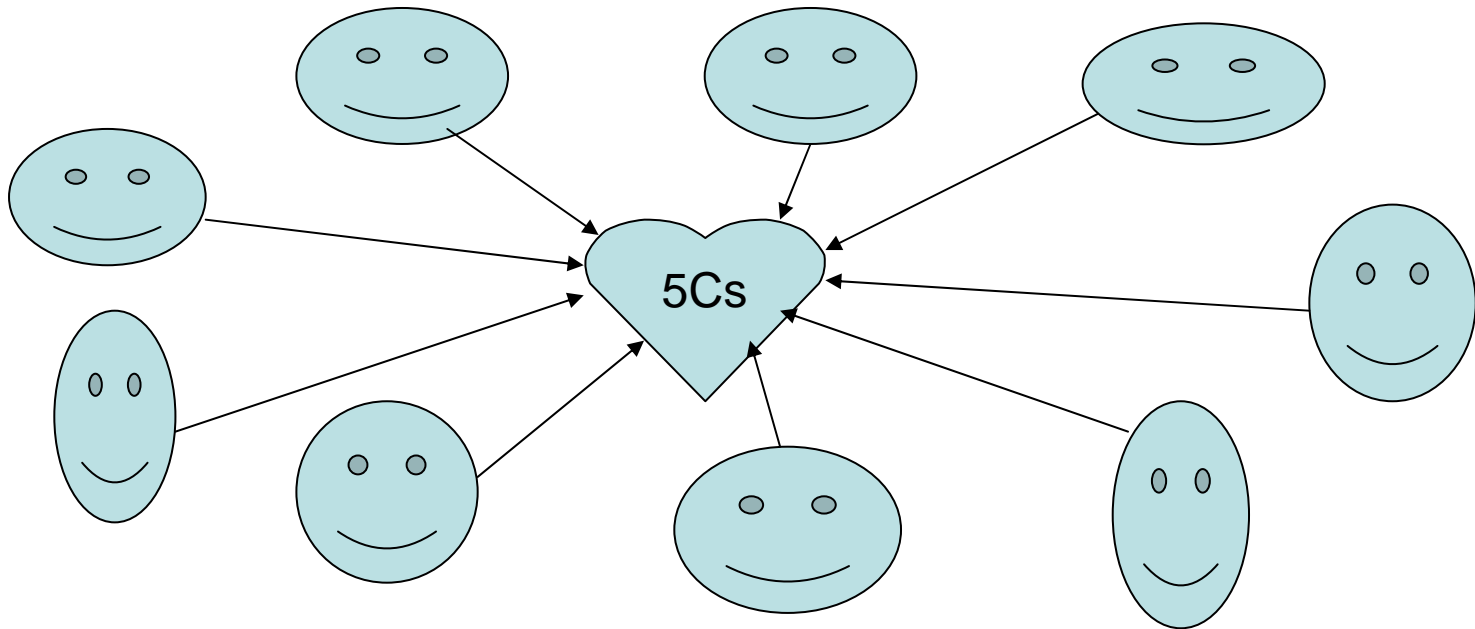


生物燃料

20080313

- Team Members: The Nine of Us!

陈莎莎、陈占明、高航、李畅、李德民、
梁敏、吴昊、杨晴、周新



Science最新一期的一篇文章

- Land Clearing and the Biofuel Carbon Debt

文章的观点:

Increasing energy use, climate change, and carbon dioxide (CO₂) emissions from fossil fuels make **switching to low-carbon fuels a high priority**. Biofuels are a potential low-carbon energy source, but whether biofuels offer carbon savings depends on **how they are produced**. Converting **rainforests, peatlands, savannas, or grasslands** to produce food crop-based biofuels in Brazil, Southeast Asia, and the United States creates a “biofuel carbon debt” by releasing 17 to 420 times more CO₂ than the annual greenhouse gas (GHG) reductions that these biofuels would provide by displacing fossil fuels. In contrast, biofuels made from **waste biomass or from biomass grown on degraded and abandoned agricultural lands planted with perennials** incur little or no carbon debt and can offer immediate and sustained GHG advantages.

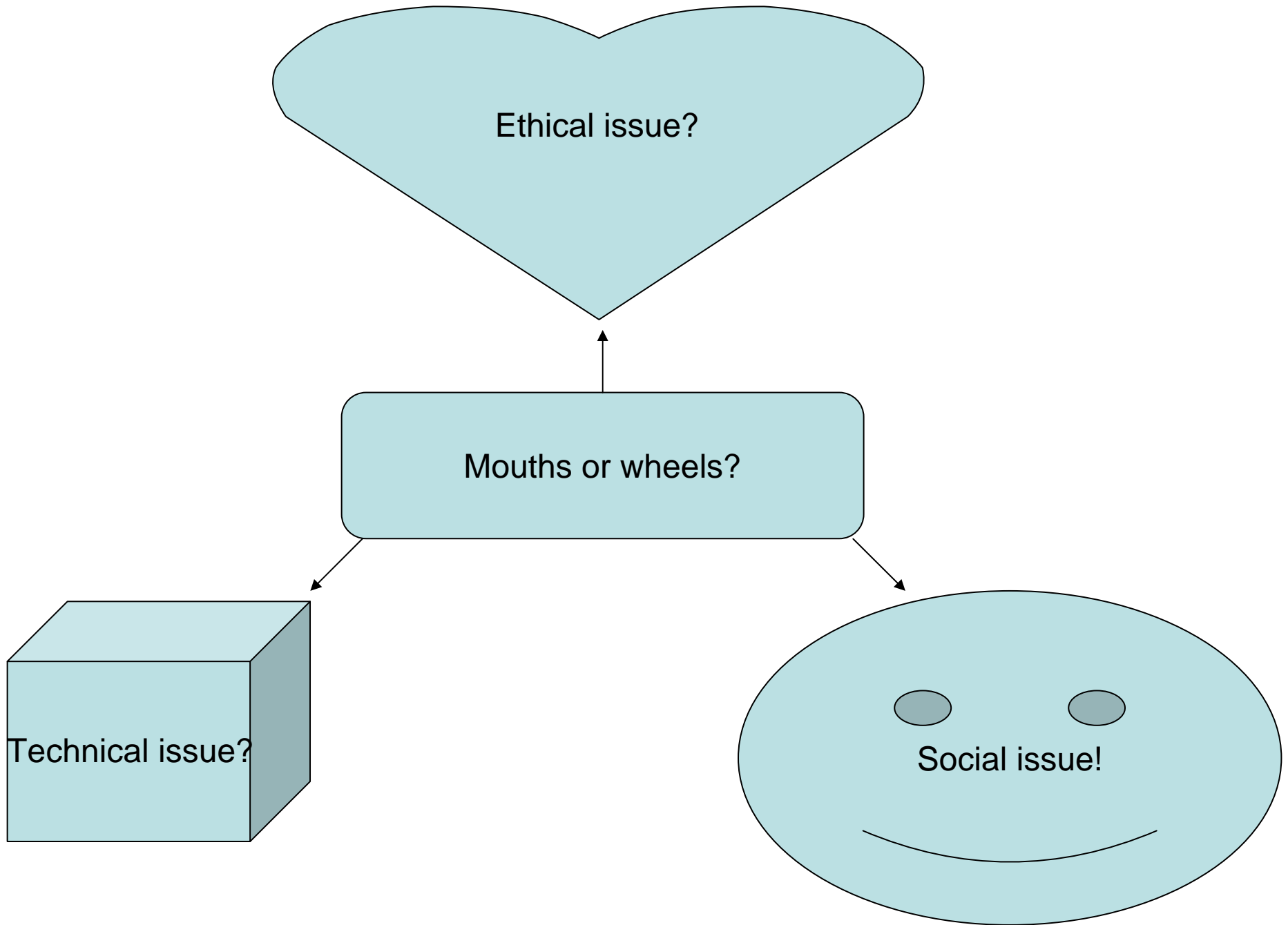
Science **319**, 1235 (2008)

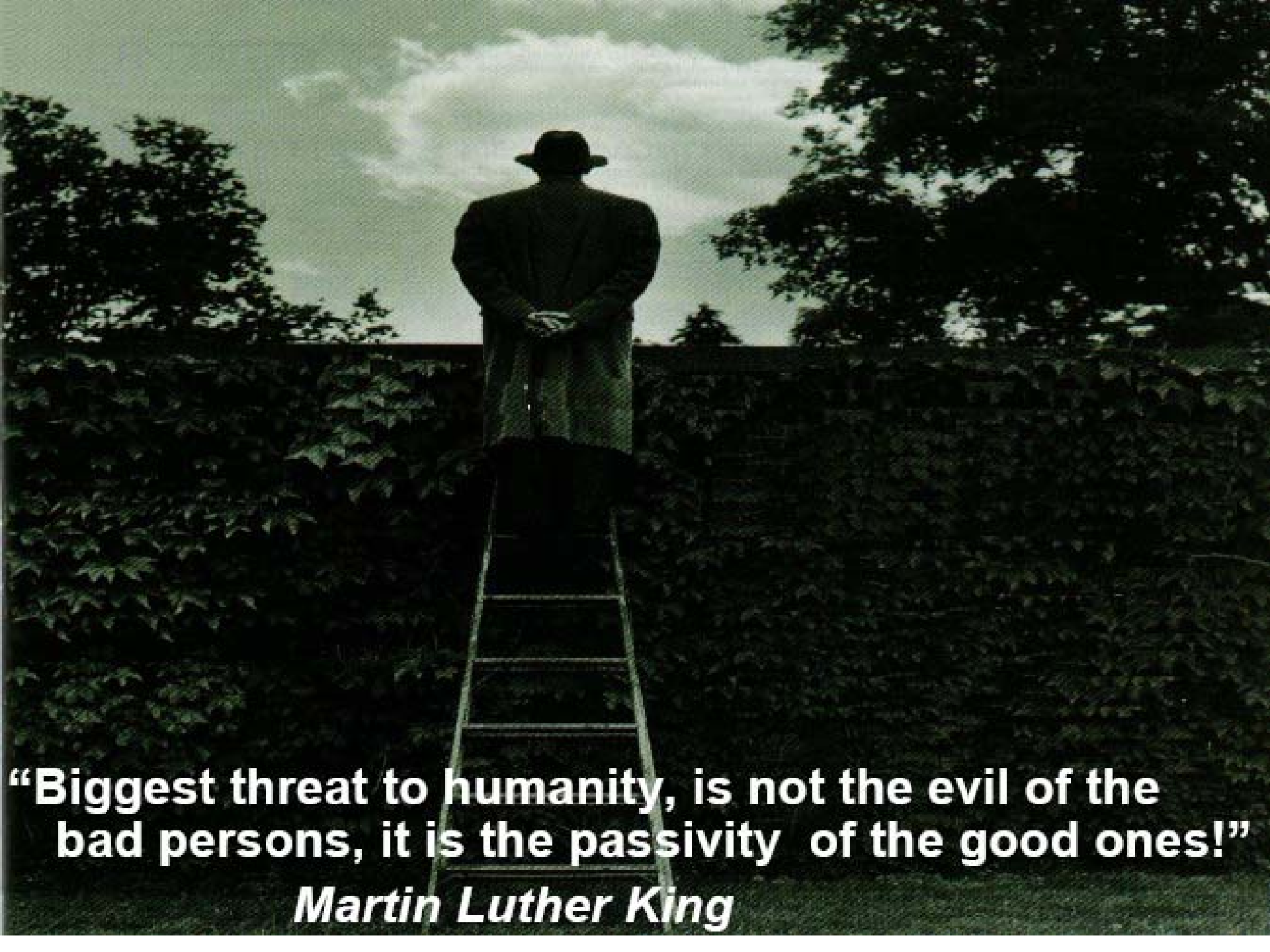
人民日报2008年3月12日第12版

- 联合国粮农组织总干事乌迪夫表示遗憾和忧虑：全球粮食总量足够养活其所承载的人口之全部，但是，每天晚上，仍然有**8.54**亿男人、女人和儿童却不得不饿着肚子睡觉。



Is humanity doomed?





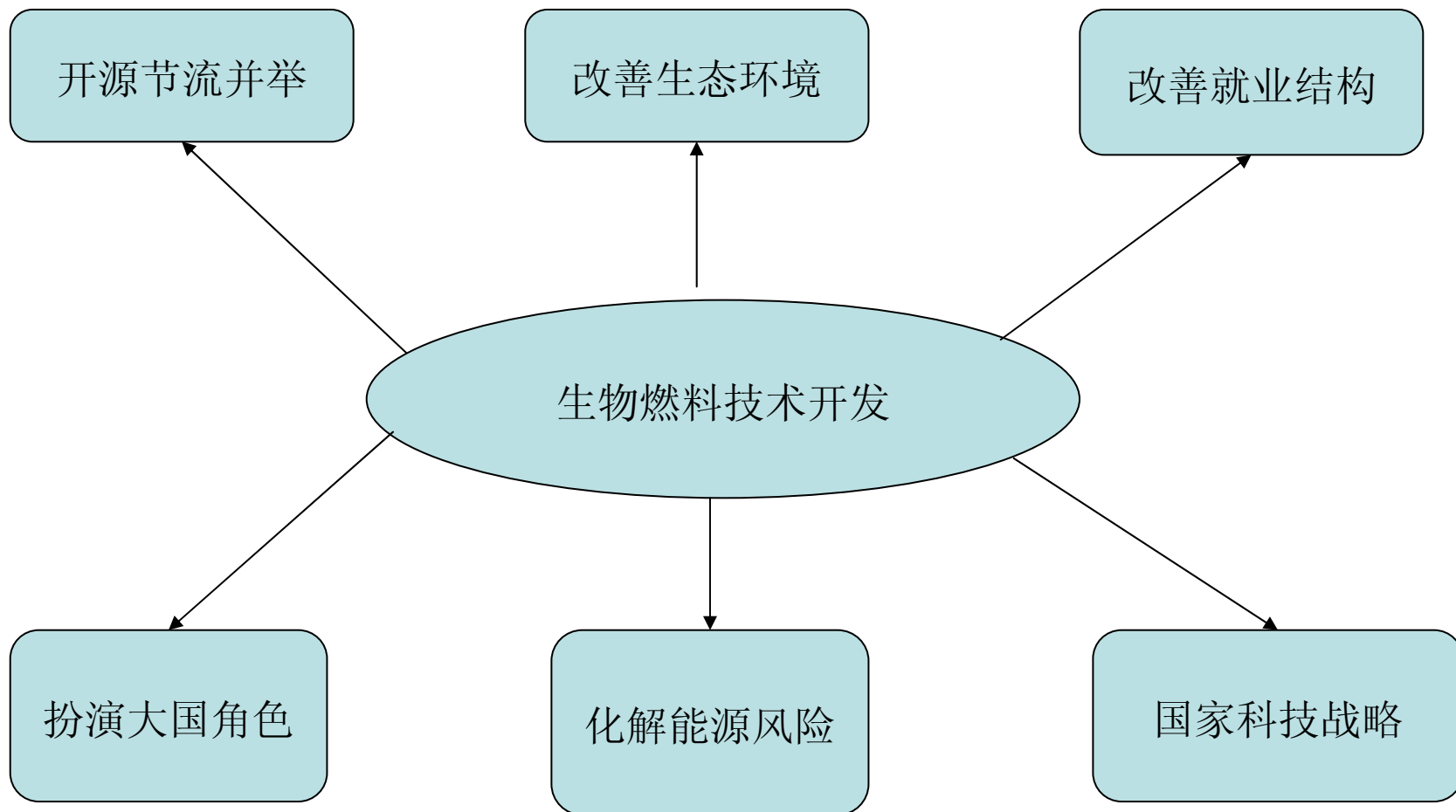
“Biggest threat to humanity, is not the evil of the bad persons, it is the passivity of the good ones!”

Martin Luther King

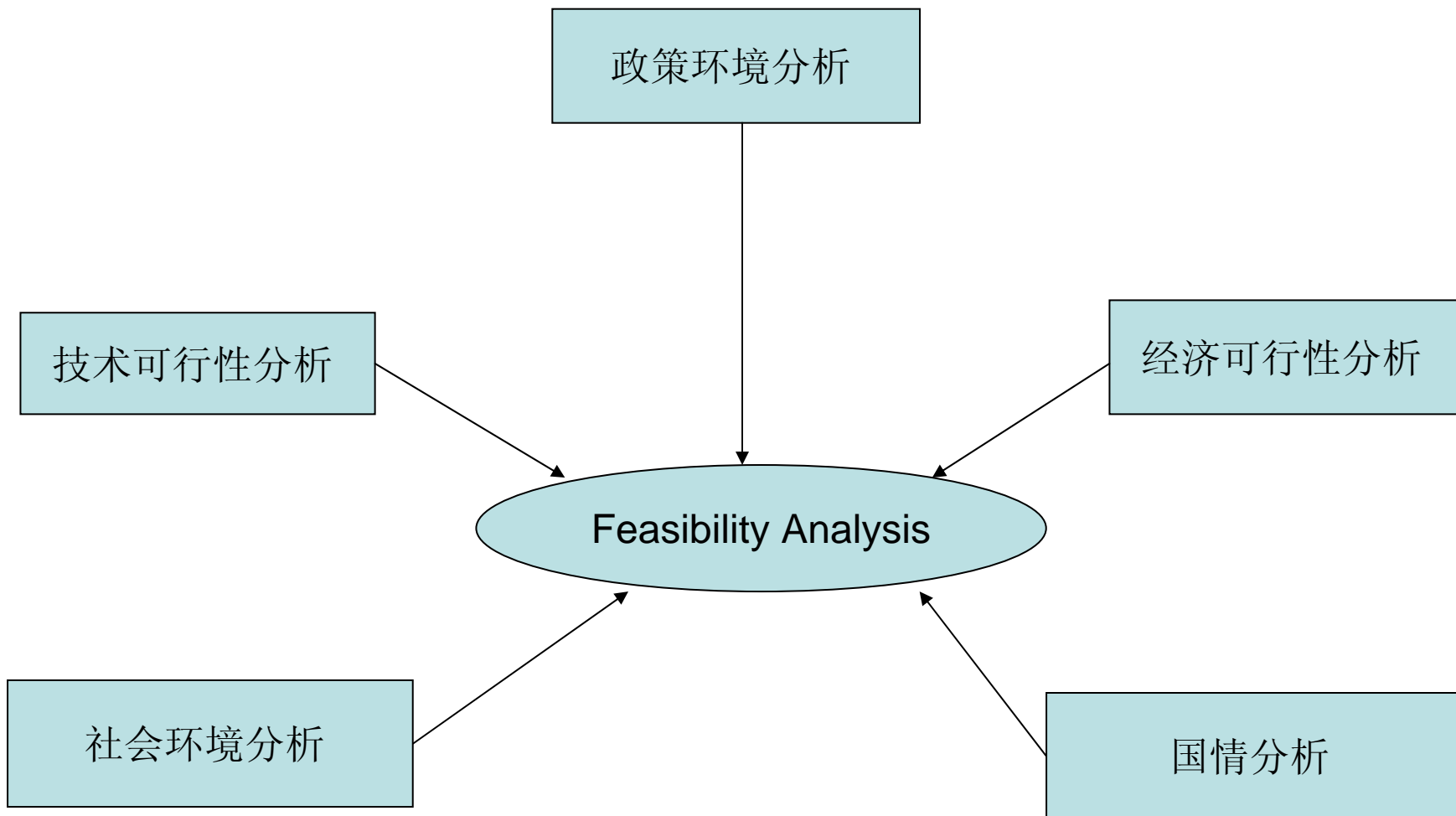
Contents we focus on

- 一、生物燃料开发的必要性论证
- 二、生物燃料开发的可行性论证
- 三、生物燃料开发的成本-收益分析
- 四、生物质能源开发前景展望

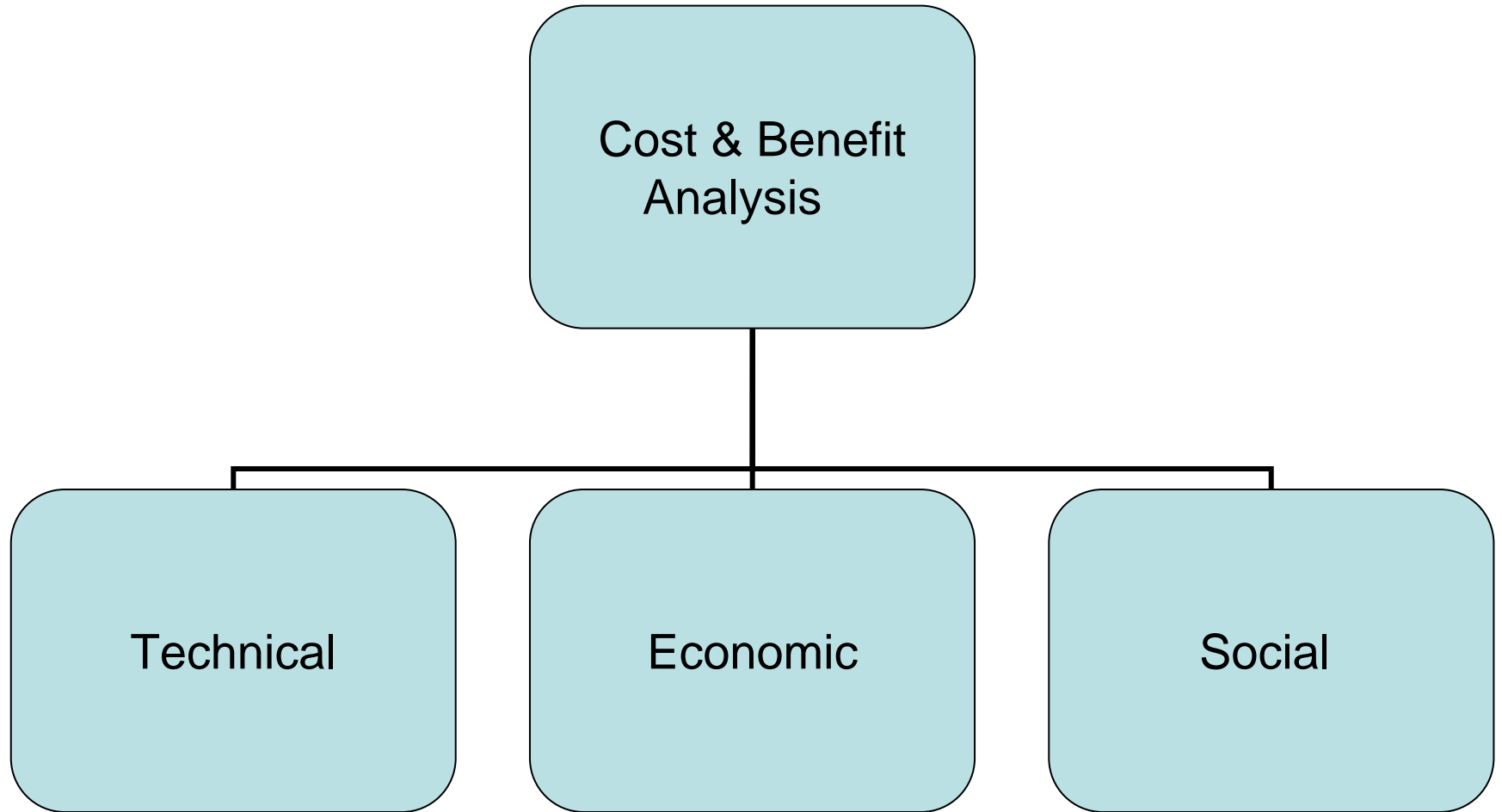
生物燃料开发的必要性



生物燃料开发的可行性论证

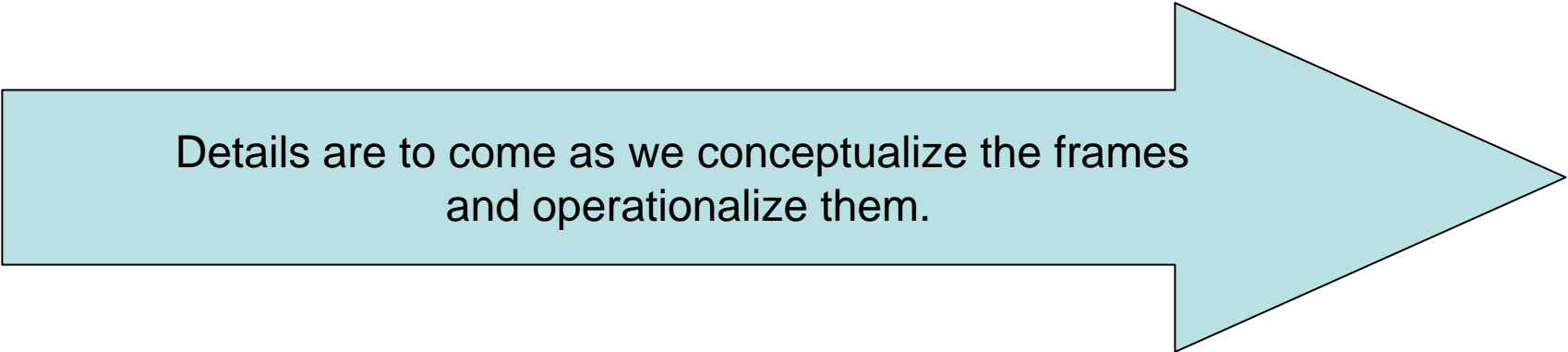


生物燃料开发的成本-收益分析



生物质能源开发前景展望

- 1. 生物质发电探索
- 2. 生物质供热探索
- 3. 生物液体燃料探索
- 4. 制约因素



Details are to come as we conceptualize the frames
and operationalize them.