A multinational perspective on business/university collaboration





Multinational Corporation Perspective - Outline

- 1. Mutual interests and sources of value
- 2. BP's innovation ecosystem
- 3. Lessons learned
- 4. The generic role of governments
- 5. Innovation with and within China
- 6. Questions



Mutual interests and sources of value

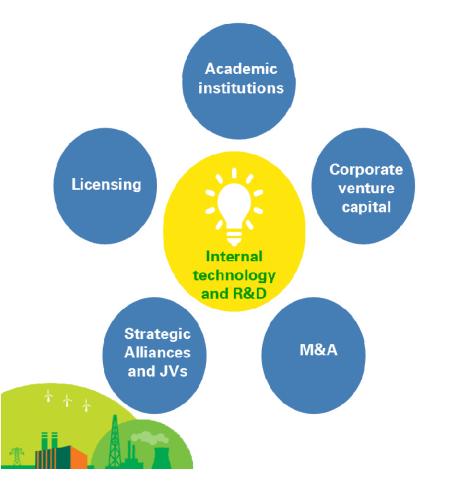
- Government support for innovation
 - o Creating jobs and wealth
 - o Strengthening international links
- Universities working on "real world " problems/data
 - o Engagement with corporate scientists
 - Development of students and career options
- Companies accessing a broader ecosystem
 - Academic freedom and unique facilities
 - o Diverse, global networks







BP's Innovation Ecosystem





- Academic relationships have a vital role to play
- o Freedom and diversity of thought
- Multi-disciplinary and multinational
- o Low utilisation of unique facilities
- o Open innovation

BP experience - multi-disciplinary and multi-national





BP Institute for Multiphase Flow at Cambridge, UK



Climate Mitigation Initiative at Princeton, US



Clean Energy Centre and Schwarzman College at Tsinghua, China



Energy Biosciences Institute, US



International Centre for

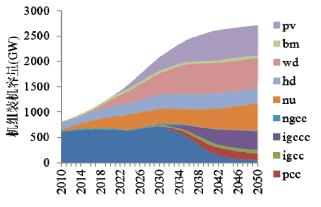
> BP-International Centre for Advanced Materials, US & UK

Lessons learned









Purpose

- Understand and respect mutual goals
- Multi-disciplinary, multinational approach



People

- Personal relationships critical to trust
- Leader of 'institute' careful selection

Perspective

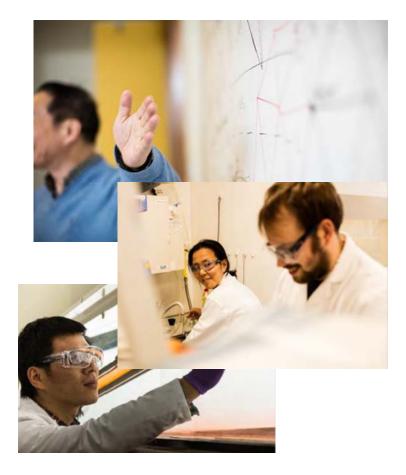
- o Long term view
- o Independent evaluatior

The generic role of governments

- Differentiate strategies by sector and regionally
- Support research and higher education system
- o Create an enabling policy environment
- Foster collaboration across innovation ecosystem







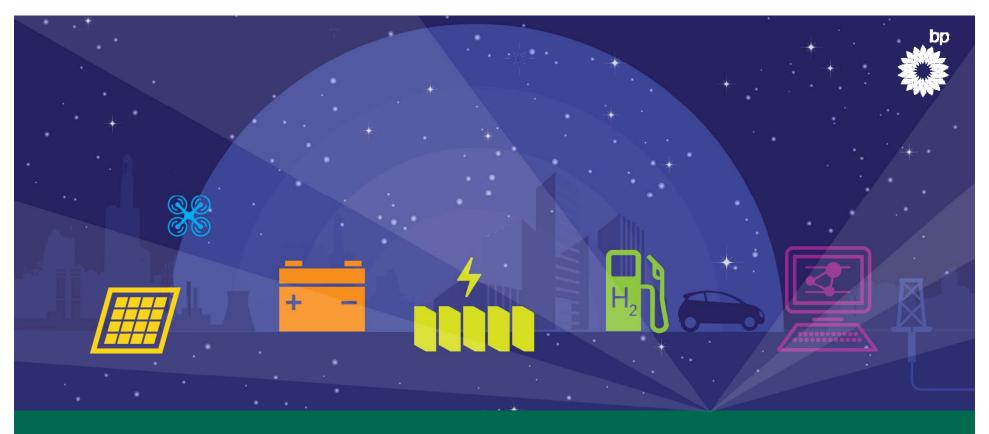
Innovation with and within China

- Challenges associated with:
 - o Urbanisation

44555

- Rising labour costs and international competition
- Environmental performance
- Innovation opportunities (beyond generic):-
 - Engage internationally
 - Research with education a more sustainable model
 - o Reinforce intellectual property rights
 - Embrace digital disruption to business models
- Avoid "technology self-sufficiency"





Thank You – Questions?

bp.com/technologyoutlook