

A presentation featured at the  
2010 Topical Symposium:  
***Economic Security: Neglected Dimension of National Security?***

Hosted by:  
The Institute for National Strategic Studies  
of  
The National Defense University

24-25 August 2010

By  
**WILLIAM C. WALDEN**



Papers presented at NDU Symposia reflect original research by members of NDU as well as other scholars and specialists in national security affairs from this country and abroad. The opinions, conclusions, and recommendations expressed or implied within are those of the authors and do not necessarily reflect the views of the Department of Defense or any other agency of the Federal Government.

# Economic Security: Neglected Dimension of National Security

Panel 4: Energy Security Fuels our National  
Security

*Migrating to Alternative Energy*

William C. Walden  
Technikon, LLC

- U.S. Energy Use 2007:
  - Fossil Sources 85%
  - Non-Fossil 15%
- Renewable % in U.S. 5%
- U.S. exported \$360 billion in 2009 for fossil fuels
- Cost to DoD was \$20 billion in 2008

- Reasons to move from fossil to Renewable Energy:
  - Carbon in the atmosphere
  - Price stability
  - Supply interruption – Dependence on foreign
  - Jobs creation in U.S.
  - Reduce environmental disasters
  - Research science is relatively mature

- Challenges and myths:
  - Low cost of fossil energy, landfill and sewage treatment
  - High cost of new infrastructure
  - R&D is being exported or appropriated
  - Technology at industrial scale is not mature
  - Private sector funding is sitting on the sideline
  - A Pre-Commercialization Gap exists and not being solved on national scale
  - We still believe that research creates manufacturing jobs

# Shrinking the Pre-Commercialization Gap

