





A GREENPRINT FOR SUSTAINABLE CONTRACEPTIVE RESEARCH & DEVELOPMENT

John W Townsend

Green Contraception Working Group

RHSC Membership Meeting, Paris

October 4-5, 2012

OVERVIEW

- Background
- What is green contraception?
- The green contraception life cycle
- Challenges
- Next Steps

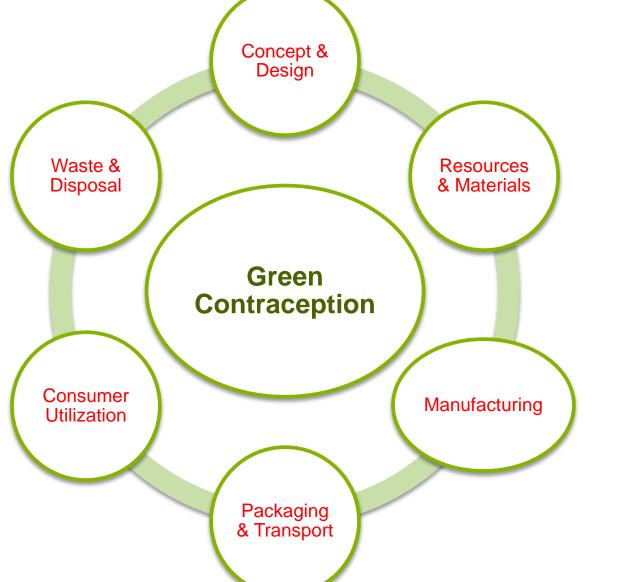
BACKGROUND

- November 2011 meeting convened by Reproductive Health Technologies Project and Population Council
- Working Group also includes NIH, EPA, USAID, PATH, an Academic, Environmental Advocate, Health Provider, Philanthropist
- The greenprint A conceptual framework for a green contraceptive research and development (R&D) agenda

WHAT IS GREEN CONTRACEPTION?

Safe and **Effective Methods** Green **Contraception** Eco-**Friendly Processes**

GREEN CONTRACEPTION LIFE CYCLE





CONCEPT & DESIGN

- Can products be designed to:
 - Minimize the number of times a client needs to use the product?
 - Enable the reuse of the materials, use of biodegradable applicators or minimal consumables?
 - Increase bodily absorption of API?
 - Meet regulatory requirements for safety, efficacy and quality



RESOURCES & MATERIALS

- Innovation in material design and production
- Efficient use of resources
- Creation and use of biodegradable and eco-friendly materials



MANUFACTURING

- Processes manufacturers could adopt to reduce the environmental impact of production, e.g. water, energy, bi-products
- Regulatory requirements for safety and quality
- Manufacturer incentives to adopt greener practices



PACKAGING & TRANSPORT

- Environmentally-friendly shipping, storage and shelf life
- Change the packaging or "final product"
 - Less packaging
 - Easily recyclable or biodegradable
- Mitigate the effects of supply chain elements on the environment and product waste



CONSUMER UTILIZATION

- Expectations
- Purchasing power: procurement systems as well as end clients
- Willingness to pay
- Ability and interest to use



WASTE & DISPOSAL

- Unused products
- Disposal or reuse of product packaging
- Device disposal
- Pharmaceutical compounds

CHALLENGES

- Cost
- Sustainable financing
- Regulatory requirements
- Knowledge and expertise

NEXT STEPS

- Expand the Circle: Contraception, 2013
- Cost-benefit Landscape Analysis
- Green chemistry and manufacturing
- Understand incentive structures
- Influence current Research & Development
- Seek quick wins and long-term impacts for sustainability