



**Overview:
Redevelopment Opportunities for Contaminated Property**

August, 2009

Presentation Overview

- Who is Encore Redevelopment?
- Representative projects
- Benefits of brownfield redevelopment – the triple bottom line
- Liability transfer issues and opportunities
- The nexus of brownfields and renewable energy and the carbon economy
- Encore Redevelopment's GateWay Approach

Who is Encore Redevelopment?

- Encore Redevelopment is a privately held firm located in Burlington, Vermont specializing in investment, project management and consulting services for real estate acquisition and development, with a focus on environmentally challenged sites
- Specific areas of expertise include:
 - brownfields redevelopment
 - liability transfer deals
 - renewable energy development
 - utilization of state of the art project management techniques

“The significant problems we face cannot be solved at the same level of thinking we were at when we created them” Albert Einstein



Representative Projects

- Development of solar farms on landfills
- Redevelopment of utility-owned contaminated property for renewable energy generation
- Assistance with securing and managing ARRA EECBG funding: Various municipalities
- Environmental Damages Evaluation: Burlington, Vermont
- Assistance with prospective purchase of Superfund site: confidential location
- Various at-risk brownfield redevelopment opportunities – in process
 - Encore as redeveloper
 - Encore as owner's rep / project manager

“To achieve great things, two things are needed; a plan, and not quite enough time.” Leonard Bernstein



The Triple Bottom Line: *Social* Benefits of Brownfields Redevelopment

- Removal of blight
- Job creation
 - Professional jobs involved in brownfields redevelopment: property developers, attorneys, engineers, scientists, environmental contractors, site contractors, accountants, bankers
- Leveraging of jobs through public investment
 - Between \$10,000 and \$13,000 in public investment in brownfields leverages 1 job¹
 - For reference, HUD uses threshold value of \$35K for 1 job
- As of March 2008: EPA Brownfields Program has leveraged 48,238 jobs and \$11.3B in private investment since 1995 using approximately \$1B in funding (10:1 return)².

Sources: 1. NEMW: The Environmental and Economic Impacts of Brownfields Redevelopment, July. 2008;
2. US EPA, OSWER, Brownfields Program Achievements



The Triple Bottom Line: *Economic* Benefits of Brownfields Redevelopment

- Leveraging Private Investment
 - Every \$1 of public money spent on brownfields redevelopment leverages \$2.50 in private investment
- Increasing Property Values
 - 5 to 15% for properties up to 3/4 mile from the site
 - “Impact” projects such as parks can result in greater increases
- Generation of Local Tax Revenue
 - Public costs usually recouped in 5 years from increased tax base
- Lower Public Investment in Infrastructure
 - Studies suggest between 10% - 35%

Source: NEMW: The Environmental and Economic Impacts of Brownfields Redevelopment, July. 2008

The Triple Bottom Line: *Environmental* Benefits of Brownfields Redevelopment

- Reduced threat to public health
 - Address threats related to uncontrolled hazardous waste sites
 - Reduce water quality impacts / improve stormwater runoff quality
- Responsible growth and saving land
 - Redevelopment of 1 acre of brownfield saves 4.5 acres of undeveloped land¹
- Reduced greenhouse gas (GHG) emissions and lowered per capita carbon footprints
 - Reclaim abandoned property closer to urban and village centers

Brownfield Redevelopment Opportunities

- The U.S. General Accounting Office estimates that there are up to 1M brownfields sites nationally encompassing 15M acres¹
- Sites in Vermont and throughout New England include manufacturing facilities, rail yards, coal gasification plants , former dry cleaners, gas stations and other sites where chemicals were used.
- Identification of **highest and best use** is crucial
 - Traditional bricks and mortar (residential, commercial, industrial)
 - Renewable energy
 - Ecological improvements (satisfy natural resource damage claims)
- Creative end uses can take advantage of incentives, grants
- Early financial analysis is key

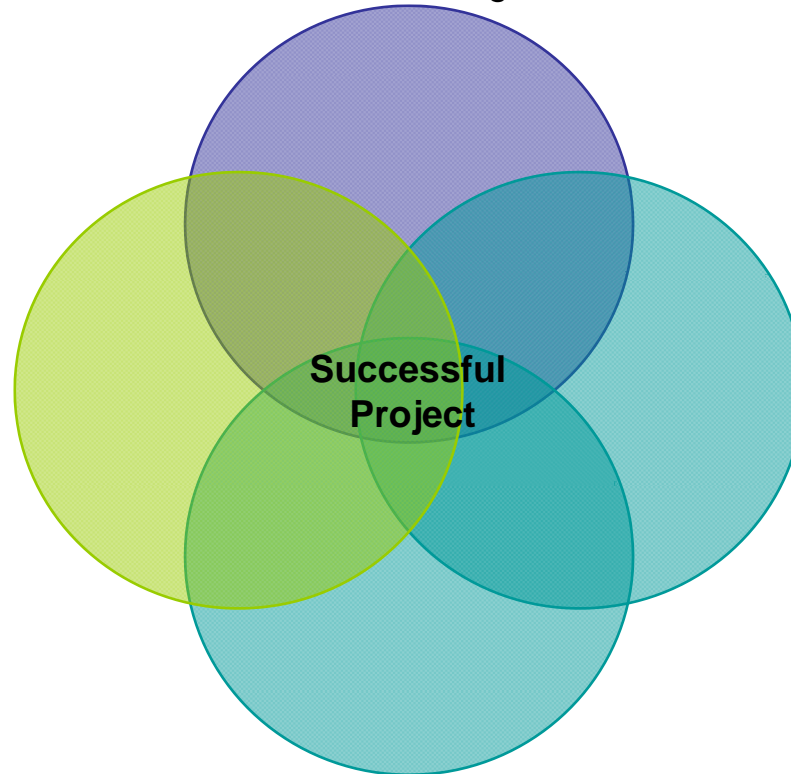
Ingredients of successful brownfields redevelopment project

Community Need / Engagement

- Community outreach/education effort
- Market analysis
- Identification of highest and best uses for community

Owner Participation

- Owner outreach/education effort
- Identification of highest and best use (for each site)
- Coordination of liability transfer issues



Developer Interest / Financial Viability

- Identification of funding/ grant opportunities
- SWOT analysis
- Summary of development opportunity
- Generation of financial proformas
- Assistance with BRELLA

Environmental Conditions Assessed / Controlled

- Phase I ESA
- QAPP
- Phase II ESA; including hazardous building materials
- Corrective Action Plan (specific to end use)

Disposition of contaminated property for redevelopment (liability transfer deals)

- Transact contaminated property to bona-fide prospective purchaser (BFPP)
 - Owner eliminates environmental liabilities from balance sheet
 - New standards by Financial Accounting Standards Board
 - Increased visibility of environmental liabilities
 - Tax advantages for cleaning up sites and transferring liabilities
 - Buyer gets control of site and is absolved of future liability, provided all criteria of BFPP are met:
 - Phase I ESA under AAI protocols prior to acquisition
 - Taking “reasonable steps” with respect to the hazardous substances found at the facility (no use of on-site contaminants)
 - Cooperating with responsible parties to allow necessary response actions

Direct Liability Transfer Model

$$\text{ELTC} = (\text{FMV}) - (\text{IC} + \text{EL} + \text{I} + \text{CC} + \text{R} + \text{K})$$

ELTC = Environmental Liability Transfer Costs

FMV = Fair Market Value (real estate)

IC = Investigative Costs

EL = Environmental Liabilities / Cleanup

I = Insurance

CC = Carry Costs

R = Repositioning Costs

K = Return on Projected Risk

3rd Party Liability Transfer Model

Seller

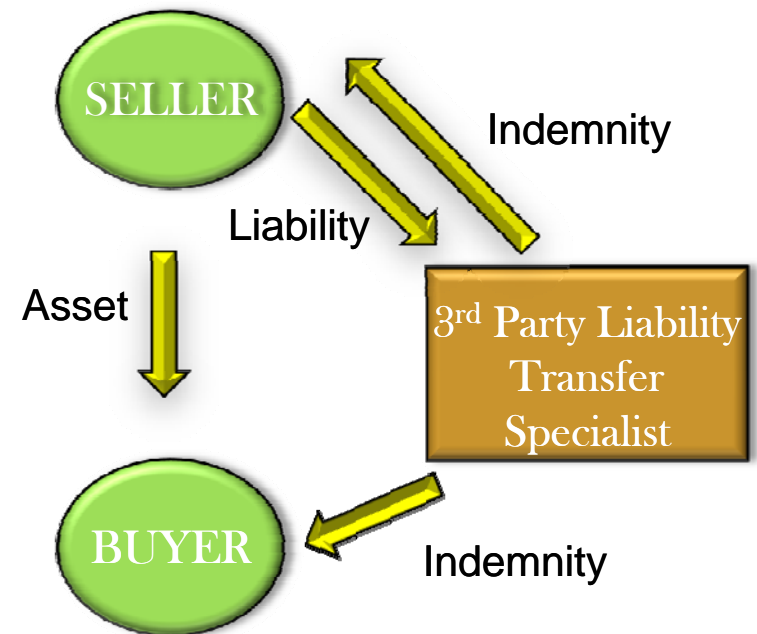
- Eliminates Environmental “Deal-Busters”
- Better Positions Asset in Market

Buyer

- Eliminates Contingencies and Lowers Winning Bid
- Provides Financial Performance Certainty

Both

- Eliminates Liabilities in Perpetuity
- No Future Dependency on Viability of Other Party
- Avoids “Our Watch, Your Watch” Post-Closing Indemnity Disputes
- Eliminates Post-Closing Transaction, O&M Costs



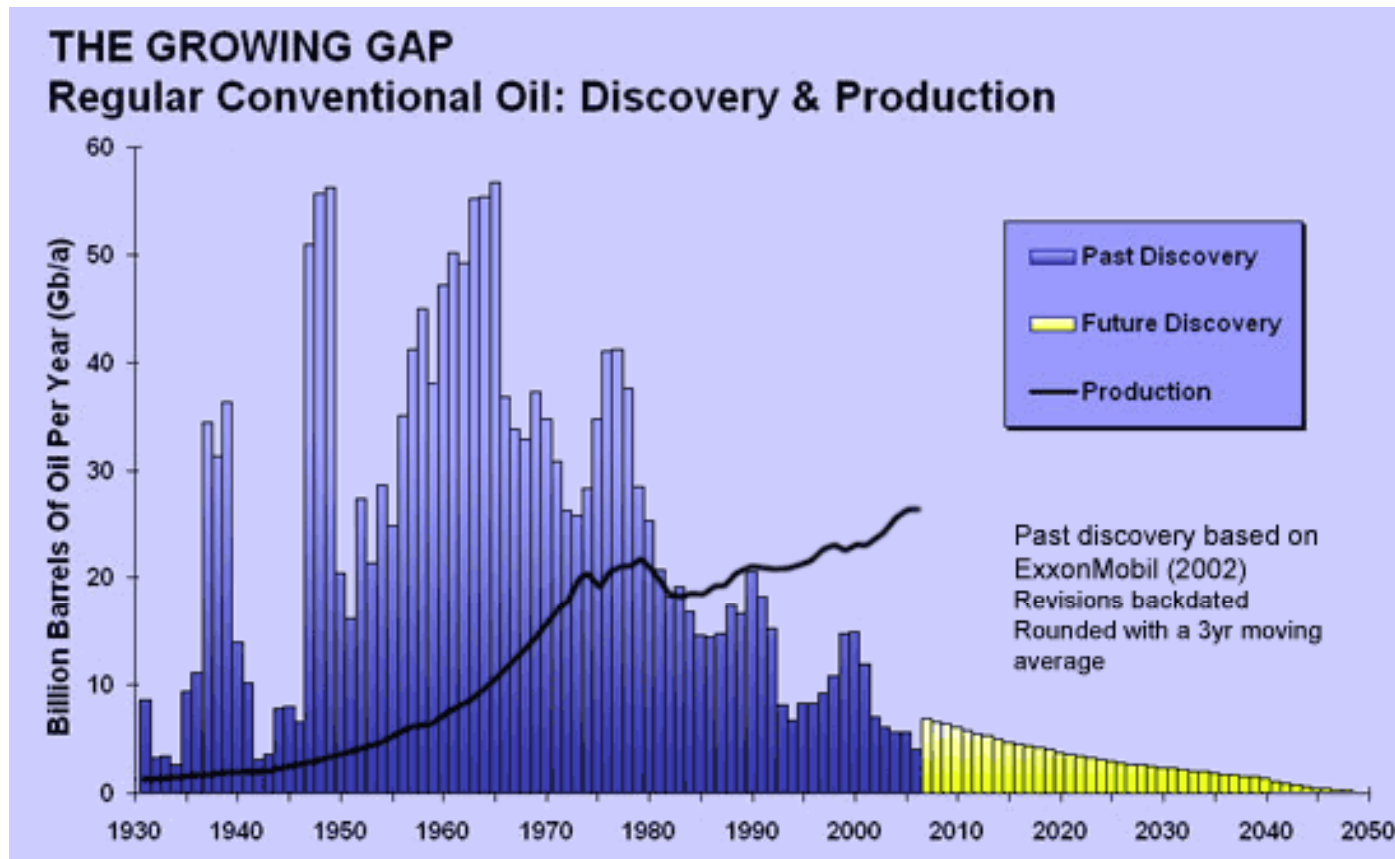
Nexus of Brownfield Redevelopment and Renewable Energy Generation

- 30% expected increase in electricity demand by 2030
- Wind, Solar, Biomass currently 2.3% of generation; expected 70% increase by 2030¹.
- Benefits of building renewable energy systems on brownfields
 - Large plots with single or limited ownership
 - Less likely to be met with aesthetic opposition
 - Existing infrastructure, favorable zoning
 - Reusing brownfield land in U.S. takes pressure off of undeveloped land².
- In Vermont, Act 45 (H.446) offers standard offer, feed-in-tariffs to spur renewable energy development

Nexus of Brownfield Redevelopment and Renewable Energy Generation (cont)

- Redevelopment of contaminated property for renewable energy generation (solar, wind, biomass, micro hydro)
 - Save \$\$ on cleanup (by employing risk-based cleanup)
 - Make \$\$ on redeveloped property
 - Ownership of infrastructure, sell power
 - Land lease to separate party for renewable generation
- Increase clean energy portfolio
- Improve corporate “green” image
- Meet increasing energy demand
- Leverage Renewable Energy Credits (RECs)
 - Also known as Green Tags, Environmental Attributes, etc.

Nexus of Brownfield Redevelopment and Renewable Energy Generation (cont)



Source: www.aspo-ireland.org

What is Encore's GateWay Approach?

- The GateWay Approach is a rigorous project management process made up of a series of critical developmental activities, or **Stages**, leading to facilitated review meetings, or **Gates**, at which decisions are made by **Gatekeepers**, who allow the process to advance to the next **Stage**
- The GateWay Approach helps to define:
 - the roles and responsibilities of the team
 - the schedule for completion of tasks and critical decisions
 - the tools available to guide the process

“Nothing is particularly hard if you divide it into small jobs” Henry Ford

Why is the GateWay Approach needed?

- Redevelopment projects are complicated, requiring exceptional **Teamwork** among numerous project team members from many different firms.
- The key to achieving effective **Cross Functional Working** is having a consistent process, proactive management of ideas and concepts, absolute clarity in roles and responsibilities, and a formal system to ensure accountability among all team members.
- The redevelopment process is an evolutionary process, continually building upon previously generated ideas and information. The GateWay Approach provides a **Roadmap** to be followed during this process.

“No man will make a great leader who wants to do it all himself, or to get all the credit for doing it.” Andrew Carnegie

Significant Elements of GateWay Approach

- Utilization of state of the art project management software and techniques to control cost and schedule
 - Use of a secure, automated, central project repository to reduce time consuming coordination between team members, avoid lags in productivity, and eliminate uncertainty regarding latest document/plan versions
 - Generation of weekly status reports to outline responsibilities and track task performance
 - Includes: critical tasks; cost concerns; coordination and scheduling items
 - Regularly scheduled weekly conference calls to keep team informed and project on track (using weekly status reports to focus discussion)
 - Generation of master program schedule, with weekly updates
 - Generation of estimates throughout the design process to track project costs
 - Estimates provided at: Concept Design, Schematic Design, Design Development, Construction Documents

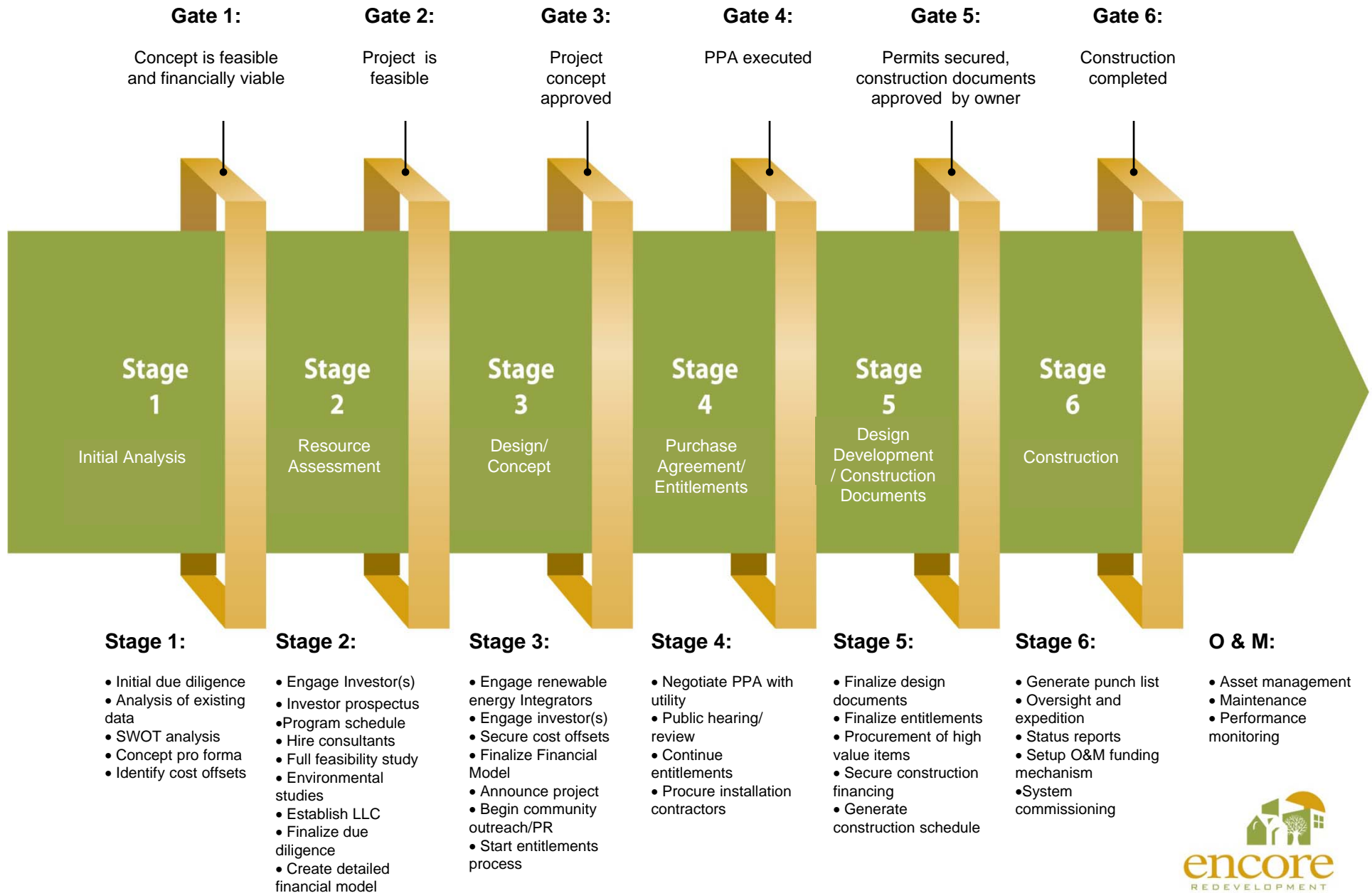
“Effective leadership is putting first things first. Effective management is discipline, carrying it out.” – Stephen Covey

Benefits of GateWay Approach

- Ultimate control of project cost and schedule
- Detailed understanding of critical path for overall project
- Single source of information for project progress (one stop shopping)
- Record keeping for all project communications
- Elimination of “project creep” and associated cost increases due to delays
- Time consuming “Babysitting” and “Cat Herding” duties transferred to PM, allowing Client’s time and energy to be focused on critical decisions
- Delivery of project on-time and under budget

“Action is the foundational key to success.” – Pablo Picasso

Redevelopment of Brownfields for Renewable Energy Generation – Program Overview



GateWay Approach – Development Process for Environmentally Challenged Sites

