

# Carbon Offsets - An Aggregator's Perspective

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**Blue Source**

# Blue Source History

- The Company was founded in 2001 by Bill Townsend and Greg Spencer. Headquarters in Salt Lake City.
- The Company has two primary business activities:
  - a ghg VER portfolio, and
  - a physical CO<sub>2</sub> and CH<sub>4</sub> project development group.
- Blue Source is owned 50/50 by its founders/senior management and First Reserve Corporation, the largest private equity energy firm in the world.
- In September 2006, First Reserve and Blue Source announced the formation of an investment source for projects up to \$500 Million in size to develop methane capture and utilization projects, physical CO<sub>2</sub> projects, as well as other GHG reduction opportunities.
- ***Today's growth:*** 13 employees, 6 offices and pipeline has tripled in last few months.



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# Blue Source Portfolio

- With hundreds of millions of tonnes of VERs (CO<sub>2</sub>e) in the portfolio, Blue Source boasts the largest single source of ghg VERs in North America.
- VERs are sourced in 45 states in vintage years from 2000 to 2019.
- The Company has approx. 45 million tonnes of VERs on existing public registries in North America.
- Blue Source has sold over 10 million tonnes and has firm forward demand for several million more tonnes generated in 2007, 2008 and 2009.
- Corporate and environmental leaders purchasing from Blue Source pool include NGO's, international investment banks, companies that have undertaken CSR commitments, energy and manufacturing companies, transportation providers, among others



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# VER Development

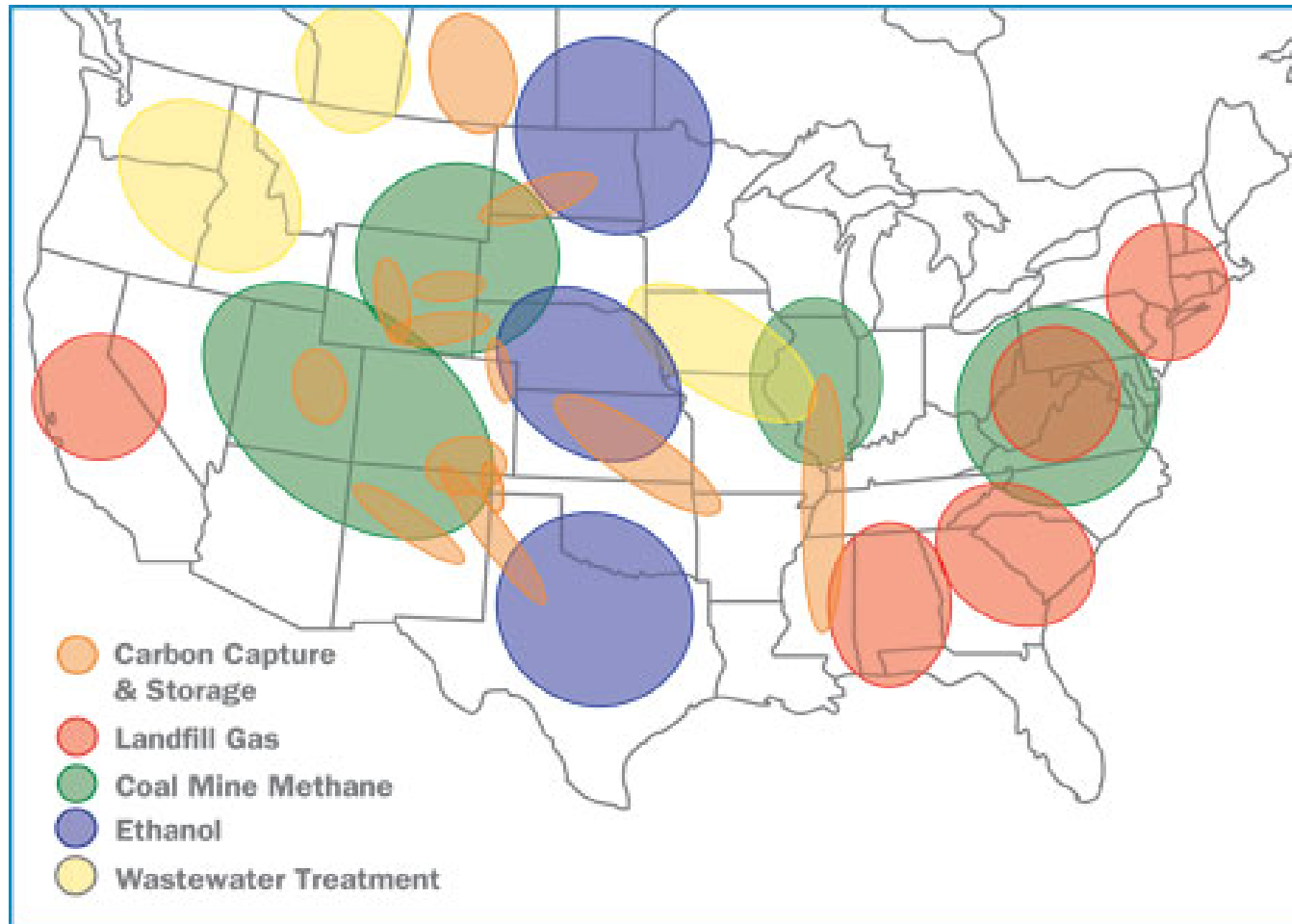
## *Based on principles of ensuring Environmental Integrity & Sustainability*

- ❑ Protocols are developed for each Emissions Reduction Project
- ❑ Projects rely on various standards including the EPA, WRI, ISO, Kyoto Protocol, and the upcoming VCS (Steering Committee member)
- ❑ Without exception, all VERs are third party certified and verified;
- ❑ Verification done by Ruby Canyon, URS Corporation, First Environment, among others;
- ❑ All carbon offsets, once verified, are stored on public registries in North America including ERT Registry and CSA Clean Projects Registry; and
- ❑ Congressional witness/advisors for carbon markets and CCS



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# Blue Source Project Development Areas



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# Blue Source Project Development History: CCS

The Company has developed, constructed and/or operated all commercial anthropogenic CO<sub>2</sub> pipelines in North America in the last 20 years.

- Operating or Under Construction:
  - Val Verde CO<sub>2</sub> Pipeline (West Texas, 1998)
  - Weyburn CO<sub>2</sub> Pipeline (Canada 2000)
  - Powder River CO<sub>2</sub> Pipeline (Wyoming, 2002)
  - North Cross CO<sub>2</sub> Pipeline (West Texas 2000)
  - La Veta CO<sub>2</sub> Pipeline ( Colorado 2007)
  
- Carbon Reduction Creation and Trading Experience
  - Sold and delivered approx. 7 million tonnes of ghg VERs from geologic sequestration
  - Sourcing approx. 700 MMCFD of geo-seq CO<sub>2</sub>A injection



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# California CCS in EOR Potential- How Big?

- 80+ large oil reservoirs with up to 4 billion barrels recoverable
- Potential storage capacity of
  - 1 billion tonnes
  - Approx. 5000 MWs of coal-sourced power generation
- CO<sub>2</sub> Sourcing Logistics



# Harnessing the Carbon Market:

- Carbon constraints encourage capital flow towards low-carbon and clean technologies
- Clear policy will encourage investment
- Early movers can benefit
- Cleantech opportunity is enormous for CA
- Flexibility and broad participation drive down costs, potentially enabling deeper cuts
- Environmental integrity is paramount to success



# If You Know It Is Coming, *Manage* the Risk

## Recommended responses:

- Offset a material portion of physical risk
  - Multiple projects, types and vintages
  - Verified, registered, qualified offsets
  - Firm/option structure matching buyer specific risks
- Consider strategic investments to hedge financial risks
  - Equity, JV, project or technology investment



“People seem to forget that the problem emissions trading is to solve, namely global warming, continues to be unabated, and that the longer we postpone implementing solutions to it, the more drastic the solution must ultimately be”

Carlton Bartels, former CEO, CO2e.com

