An Introduction to Pollution Prevention Finance

How to better fund pollution prevention interventions through leveraging available and innovative funding mechanisms

Office of Pollution Prevention & Toxics

2021

Landscape of Financing Options

P2 Financing Tools

Commercial Financing

Traditional Lending

Commercial banks often have special lending programs for small and medium-sized businesses.

CDFIs

Community Development Finance Institutions (CDFIs) often have low interest loan programs to support small business P2 investments.

Impact Investing

New types of investors are providing affordable finance to businesses supporting P2.

Government Resources and Programs

State P2 Programs

Many state environmental agencies have P2 programs which may be able to help connect businesses with P2 financing assistance or information.

State Government Financial Incentives and Resources

Governments have many financial incentives and resources available for businesses.

Example Small Business P2 Project Categories

- **Good housekeeping:** including efficient operation of machinery, monitoring of raw material flows, segregating waste, and training staff.
- **Materials substitution:** such as phasing out chlorofluorocarbons (CFCs) and switching from solvent-based paints to water-based alternatives.
- **Manufacturing modifications:** including cutting the number of processes or switching from chemical to mechanical and introducing closed-loop processing.
- **Resource recovery:** for example, reusing pollutants in the same process and selling waste by-product as raw materials in other industries.

Financing: Key Terms

Debt instruments:

- **Loans**:
  - Funds provided to an organization with a commitment to repay the principal plus interest. Loans can have senior or subordinate status, affecting the lender's priority of repayment over other creditors in the event of default.
- **Loan guarantees**:
  - An agreement to perform the obligations of a third party if that party defaults. When a third party guarantees a loan, it promises to pay in the event of default by the borrower.

Financing: Key Terms (continued)

Equity investments:

- The goal is to make capital more available through direct investment in a business, typically in exchange for a share of ownership, stock, or access to profits. Can address concerns over cash flow because they do not feature a strict repayment schedule.

Credit Line:

- An arrangement between a financial institution—usually a bank—and a customer that establishes the maximum loan amount the customer can borrow.

Financing: Key Terms

Tax incentives:

- State and local governments offer most tax incentives to businesses. They are offered on the premise that reducing taxes lowers the cost of doing business, making it more attractive to expand operations.

Grants:

- Little direct grant assistance is available, and competition is fierce. Many grants are cost-shared, requiring financial commitments from recipients.

In reality, tax incentives and grants constitute a small share of options available to small and medium enterprises (SMEs).

Overview of P2 Financing Tools: Introduction to the Landscape

What is the P2 financing challenge for SMEs?

- P2 projects often have costs (e.g., new equipment, contractor services) that require cash disbursements upfront, with potential savings (avoided costs) accruing over time.
- P2 projects often compete with other internal projects that are essential for revenue generation for limited resources. P2 projects are typically last on the list of projects a company must budget for; unless they result in a short return on investment (ROI).
- Small businesses may not be used to borrowing money from external sources or they may not think that they are able to do so at affordable terms.

Overview of P2 Financing Tools: Introduction to the Landscape (continued)

How can small business loans help SMEs gain access to capital?

- Small business loans are a key means of making upfront capital available to businesses.
- Small businesses must apply for loans, providing information that enables the lender to assess risk of repayment.
- Loan terms include both the interest rate and payment period.

Overview of P2 Financing Tools: Introduction to the Landscape (continued)

Why are small business loans often difficult for SMEs to access?

- Small business loans often have higher interest rates and shorter payback periods because they have higher risk profiles.
- Lending risk for small businesses is often due to (1) limited assets that can serve as collateral, and/or (2) fragile balance sheets with uncertain revenue prospects.
- Low profit margins for small businesses make it difficult to secure capital.

Overview of P2 Financing Tools: Introduction to the Landscape (continued)

Lenders can make loans more accessible to SMEs using a variety of techniques to lower or spread risk in ways that enable them to:

- Reduce the borrower's cost of financing; e.g., with lower interest rates.
- Lengthen payback periods to reduce the size of regular loan payments.

Overview of P2 Financing Tools: Introduction to the Landscape (continued)

Techniques that can make small business loans more attractive to lenders:

- **Loan guarantees:** Reducing lender's risk, making capital more available by providing incentives like loan guarantees.
- **Tax credits or abatements:** Helping improve a project's cash flow.
- **Technical assistance:** Providing comfort to lenders/investors via things like technical assistance information, training requirements, or programs that show planned improvements will yield benefits.
- **Loan bundling:** Banks sell several loans together as a single combined unit, often for a lower price and with less risk than they would charge investors to buy each item separately.

Overview of P2 Financing Tools: Introduction to the Landscape (continued)

Techniques that can make small business loans more attractive to lenders (continued):

- **Securitization:** Banks merge or pool loans into a group which is repackaged and sold to investors.
- **Insurance:** Loan protection insurance covers debt payments on certain covered loans if the insured loses their ability to pay due to a covered event.
- **Tax-harvesting:** The selling of securities at a loss to offset a capital gains tax liability. This strategy is typically employed to limit the recognition of short-term capital gains.
- **Loan loss reserve:** An expense set aside as an allowance for uncollected loans and loan payments. This somewhat reduces the risk for investors, making them more likely to invest.

Commercial Financing for P2

Commercial investment banks are utilizing creative approaches to help small businesses access capital.

- Banks can invest in community-facing financial intermediaries that on-lend to businesses.
- These intermediaries provide loans to businesses for specific projects, toward goals such as improving their local community.
- Example: Calvert Impact Capital

State P2 Financing Programs

- **Several states** offer incentive programs for small/medium businesses to finance projects to reduce their pollution emissions.
- A few notable examples are included on the following slides.

State P2 Financing Programs (continued)

Michigan's Small Business Pollution Prevention (P2) Loan Program offers low-interest loans for projects that reduce waste, or conserve water or energy.

- Applicants must be independently owned and operated, not dominant in their field, and employ < 500 people.
- Projects must reduce waste, reuse or recycle that waste in an environmentally sound way, or reduce water or energy usage.
- Maximum loan $400,000, max interest rate 5%.
- No match money is required from applicants. Participating lending institutions provide 50% of the funds. The Revolving Loan Fund (RLF) provides the other 50%.

State P2 Financing Programs (continued)

Minnesota Small Business Environmental Improvement Loans:

- Provides loans at **0% interest** to SMEs for capital equipment purchases that help the company meet or exceed environmental regulations, and costs associated with the investigation and cleanup of contaminated sites.
- Borrower must be an existing small business corporation, sole proprietorship, partnership, or association with < 100 employees, profit <$500,000/year, and a demonstrated ability to repay the loan.
- Loan amount between $1,000 and $75,000.
- Repayment term up to seven years.
- Flexibility in the types of collateral accepted.
- Awarded throughout the year.

State P2 Financing Programs (continued)

California Pollution Control Financing Authority (CPCFA):

- Provides low-cost financing by partnering with sister state agencies to deliver access to private financing options for regulated businesses.
- CPCFA can facilitate low-cost financing for qualified waste and recycling projects and other projects that control pollution and improve water supply.
- CPCFA also administers the **California Capital Access Program (CalCAP),** which encourages financial institutions to make loans to small businesses and provides for specialty programs targeted toward building an improved infrastructure for zero- and partial-emission vehicles and helping small businesses comply with the federal Americans With Disabilities Act.

State P2 Financing Programs (continued)

Pennsylvania Office of Pollution Prevention:

- Leverages DOE funds to support low-interest loan financing for energy efficiency retrofits and the installation of energy conservation measures and high-performance energy systems in buildings.
- A revolving loan program serves energy and pollution prevention projects. A Small Business Advantage Grant program also offers matching grants to install energy and pollution saving equipment in small businesses.

State P2 Financing Programs (continued)

New York:

- The Syracuse University Environmental Finance Center houses a funding guide database for municipalities and local governments looking to fund sustainable and environmentally friendly capital projects.
- New York State Energy Research & Development Agency (NYSERDA) offers two loan options to help residents finance energy efficiency and renewable energy improvements made through NYSERDA's programs. These loans provide lower interest rates to low-income New Yorkers and those who cannot qualify for traditional financing.

State P2 Financing Programs (continued)

States and localities offer a range of financing programs and incentives. Resources include:

- The DSIRE Database of State Incentives for Renewables & Efficiency is a comprehensive source of information on incentives and policies that support renewables and energy efficiency in the U.S. (operated by the N.C. Clean Energy Technology Center at North Carolina State University and funded by the U.S. Department of Energy).
- The ACEEE State and Local Policy Database of Financial Incentives provides a list of financial incentive programs by state.

Federal P2 Financing Programs and Resources

The federal government does very little direct funding of small businesses on P2 projects.

- The **Department of Commerce's CDFI Fund** invest federal dollars alongside private capital for Community Development Finance Institutions (CDFIs) *(these are described on a later slide).*
- The **U.S. Small Business Administration**:
  - Provides economic injury loans to small businesses impacted by COVID-19.
  - Offers "Pollution Control Loans" to aid businesses in reducing their environmental impact. ***Currently this program is not available due to lack of appropriations.***
- The National Institute of Standards & Technology (NIST) **Manufacturing Extension Partnership** is a federally-funded resource for providing technical assistance; NIST does not provide loans.

State/Federal Supplemental Environmental Projects (SEPs)

- Minnesota Technical Assistance Program (MnTAP): Local trichloroethylene (TCE) users will receive free technical assistance to transition to safer solvent options. This P2 work will be funded by an SEP negotiated between a TCE violator and the Minnesota Pollution Control Agency.

- Nationwide Volkswagen settlement funds are being used by states to implement P2 projects to reduce hazardous air pollutants. https://www.epa.gov/enforcement/volkswagen-clean-air-act-civil-settlement

Green Banks

A green bank is an entity that uses limited public dollars to attract private capital investment in projects for implementing clean energy projects. It makes P2 projects more affordable and accessible to SMEs.

- Green banks can look like a state P2 financing program, although they can also fund a broader range of activities.
- The Connecticut Green Bank works with private-sector investors to create low-cost, long-term sustainable financing to maximize the use of public funds.
  - Since 2011, the Bank and its private investment partners have deployed over a $1.6 billion in capital for clean energy projects.
  - Projects recorded through FY 2019 show that for every $1 of public funds committed by the Green Bank, an additional $6 in private investment occurred in the economy.

CDFI Financing Programs

Community Development Financial Institutions (CDFIs)

- CDFIs are private financial institutions that deliver affordable lending to help low-income, low-wealth, and other disadvantaged people and communities. By financing community businesses, CDFIs spark job growth and retention in hard-to serve markets.
- CDFIs often run below market rate loan and venture capital programs for SMEs. Some prioritize lending to businesses addressing environmental or socially-beneficial projects.
- Examples of CDFIs include Craft3 (Washington State and Oregon) and Coastal Enterprise (Maine).
- CDFIs are supported by the CDFI Fund administered by the U.S. Department of Treasury.

Development Finance Agencies and Industrial Development Bonds

Industrial Development Bonds (IDBs):

- Tax-exempt, below-market-rate private bonds that enable state and local governments to help borrowers access capital in their communities. Max $10 million.

Development Finance Agencies (DFAs):

- Public or public/private authorities that provide direct or indirect financing programs. They may issue tax-exempt and taxable bonds, offer direct lending, or a range of access to capital financing mechanisms. **Development Finance** is the efforts of localities to support expansion through public/private investment in business; this can include debt, equity, credits, liabilities, technical assistance, venture capital, etc.

Development Finance Agencies and Industrial Development Bonds (continued)

The Council of Development Finance Agencies (CDFA):

- A resource clearinghouse for thousands of industrial parks and entities that have special bonding authority, including bonds that can directly support P2 for businesses.
- The CDFA State Financing Program Directory catalogs over 350 development finance programs offered by state governments.

Green Bond Programs

Green Bonds:

- Debt instruments designed to raise funds for projects and businesses that have a positive environmental or social impact.
- They finance projects that will have positive environmental effects.
- What bonds qualify as green? Some follow the Green Bond Principles as a guide; there are also companies that assess whether a project is green enough. The European Union (EU) is creating a Green Bond Standard.

Other Emerging and Innovative Efforts

Impact Investing:

- A spectrum of investment practices intended to generate social and/or environmental impact alongside financial return. Hallmarks are **intentionality** (clear intent to make a social impact), **impact measurement** and management, and some degree of **financial return.**

Social Impact Bonds (SIB):

- Also known as Pay for Performance Bonds or Pay for Success Bonds. Includes a contract where payment from a government agency is tied solely to outcomes. Generally, the public agency has few other controls or restrictions on the provider.

Other Emerging and Innovative Efforts (continued)

Crowdfunding:

- Funding a project or venture by raising small amounts of money from a large number of people, typically via the Internet.

Questions?

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