

EXPERTISE

- **Clean Power Investments**
- **Clean Power Project Finance**
- **Clean Power Financial Advisory**

ASSIGNMENTS

Structured equity & debt financing for renewable power and other infrastructure projects for domestic U.S. and emerging market projects

YEARS OF EXPERIENCE

Infrastructure Finance: 30 Years
Renewable Power Finance: 17 Years

LICENSES

FINRA Series 7 & 63

EDUCATION

MA in Law and Diplomacy, 1985
The Fletcher School of Law & Diplomacy
Tufts University, Massachusetts

Certificate in French Language Studies, 1981
l'Université de Grenoble, France

BA in Government, 1980
Pomona College, California

British Parliament internship, 1979,
Birkbeck College, University of London

BOARD & PROFESSIONAL ASSOCIATIONS

Co-Chair -Advisory Board, [Center for International Environment & Resource Policy](#)
Fletcher School of Law & Diplomacy
Member:
Northeast Clean Energy Council
Solar Energy Business Association of New England (SEBANE)
Smart Electric Power Alliance
Northeast Energy & Commerce Association

PUBLICATIONS & PRESENTATIONS

Lead author, 2007 report on wind project financing structures
Lawrence Berkeley National Laboratory
<https://eta.lbl.gov/sites/default/files/publications/report-lbni-63434.pdf>

John P. Harper

Senior Renewable Power Finance Advisor

PROFESSIONAL PROFILE

John Harper leads Birch Tree Capital, LLC, an independent financial advisory firm helping clients understand and close financing for renewable power projects. Birch Tree Capital assists investors, buyers, developers, and public sector entities on:

- clean power investment strategies and financing structures
- sourcing equity, debt, & grant financing for wind & solar & storage projects
- project due diligence reviews and contract negotiations
- clean power financial incentive programs
- financing for emerging clean power technology companies.

Clients have included equity investors (strategic and institutional), fund managers, developers, off-takers, and lenders. Mr. Harper also advises public and non-profit entities on clean power financing structures and incentives and sourcing clean power. He is a frequent speaker on policy and mechanisms for financing distributed commercial solar projects.

Mr. Harper is highly experienced in structuring equity and debt for renewable power and other infrastructure projects. Before founding Birch Tree Capital, he closed debt and equity financing for domestic and international power and other infrastructure projects for multiple global companies, including EDF Renewable Energy, ABB, Wärtsilä, and the Overseas Private Investment Corporation (OPIC). He co-founded Cedar Energy Investors to invest in small commercial solar projects in New England.

RELEVANT EXPERIENCE

2004 – Present	Founder and Principal, Birch Tree Capital, LLC
2011 – Present	Co-Founder and Partner, Cedar Energy Investors
2007- 2009	VP-Finance & Treasurer, Ze-Gen, Inc.
2003- 2004	Director of Finance, EDF Renewable Energy (formerly enXco, Inc.)
2000- 2002	VP- Business Development, ABB Financial Services
1996- 1999	Managing Director- Finance, Wärtsilä Power Development
1986- 1996	Manager- Finance, Overseas Private Investment Corporation

REPRESENTATIVE ASSIGNMENTS

- Sourcing equity co-investors for a major U.S. bank investing tax equity in solar and wind power projects.
- Interim senior finance manager for a national developer of commercial-scale solar projects. Closed financing for multiple projects.
- Solar advisor for a global consumer electronics firm seeking solar power for its headquarters campus: restructured bid process, recommended best contractor and contract format, reviewed projected savings and documentation.
- Co-founder and partner of an investment firm owning small commercial solar power projects in New England. Identify suitable partners and projects, negotiate project contracts, manage existing solar project portfolio.

Co-author, 2012 Review of §1603 tax grants,
and
Peer reviewer, 2012 Report on impact of
financial structures on cost of solar
National Renewable Energy Laboratory
[https://financere.nrel.gov/finance/content/
nrel-finance-team-publications](https://financere.nrel.gov/finance/content/nrel-finance-team-publications)

Peer reviewer, 2014 report on tax equity for
solar and wind projects,
U.S. DOE Lawrence Berkeley National Labs
(<http://emp.lbl.gov/sites/all/files/lbnl-6610e.pdf>)

Co-Author, 2007 study for State of Rhode
Island profiling financial viability of in-state
wind projects.

Conference Chairman & Panel Moderator,
Distributed Solar East Summit,
May 2015.

Speaker on Massachusetts solar incentives
Solar Power Finance & Investment Summit
February 2014.

Panelist, Innovative Financing Structures,
Distributed Solar East conference,
June 2013.

Speaker on Financing Structures
Solar Power Finance & Investment Summit
March 2013.

Lecturer, Creative Solar Finance course,
MBA Interterm, University of Notre Dame,
Spring 2013.

Panelist, Distributed Solar Summits,
May 2015 and November 2012.

Lecturer, Leading Clean Energy Ventures
Certificate Program, co-sponsored by the
Northeast Clean Energy Council & Boston
University School of Management, 2011-12

Moderator, Roundtable review of financing
for renewable power projects, Tax Planning
for Renewable Energy Projects Workshop,
September 2011.

Moderator, Distributed Solar Project Risks
panel, Distributed Solar Finance Summit,
December 2010.

- Advised several Massachusetts towns in selecting solar developers/projects, and negotiating purchase contract documentation.
- Advised regional commercial banks considering commencing solar lending operations.
- Advised state agencies in Massachusetts, Delaware, and New Jersey on financing incentives and programs for solar and wind projects.
- Assisted a proposed distributed solar and wind project equity fund. Wrote investment strategy; generated project pipeline; established due diligence investment evaluation procedures, identified potential fund investors.
- Assisted an association of non-profit entities to expand its solar power vendor services. Helped select solar developers to design, finance, install, and operate distributed solar projects for member facilities. Helped design the selection process, interview developer candidates, and negotiate program agreements.
- For international life insurance company, led team investing in domestic U.S. wind projects. Closed investments in almost 300MW of projects; \$450 million in capitalization. Monitored portfolio. Advised on subsequent sales of tax equity interests.
- Advised National Renewable Energy Laboratory (NREL) on financing structures and market trends for utility-scale solar projects. Prepared illustrative solar investment models to enable NREL to enhance its SAM project modeling software program.
- Assisted a venture capital-backed start-up energy efficiency company negotiating a financing program to fund small-scale energy efficiency and solar projects for commercial/industrial clients.
- Advised a solar project developer on partnering with a national real estate investment trust (REIT) for financing distributed commercial solar projects.
- *For Ze-gen*: Senior finance officer for waste-to-energy clean tech start-up. Closed \$22.5 million in Series B equity and corporate venture debt.
- *For ABB*: Wrote firm's business plan for financing U.S. wind projects. Committed \$72 million in loans for wind & other clean power projects.
- *For EDF Renewable Energy*: Closed \$126 million in equity and debt financing for a portfolio of nine wind projects. 2002 financing was the first U.S. project to source both third party tax-oriented institutional equity and syndicated commercial bank debt.
- *For Wärtsilä*: Sourced \$330 million in debt and equity commitments from multilateral development banks and international companies for utility-scale power projects in Pakistan, Bangladesh, and Kenya.
 - Sourced international political risk insurance for equity investments.
- *For the Overseas Private Investment Corporation*:
 - Led ten-person team financing U.S. private investments in Russia & other former Soviet republics. Directed \$550 million in loan commitments for telecommunications, oil, mining, and financial services projects.
 - Lead loan officer for telecommunications, oil, mining, tourism, and other investments in Latin America, Caribbean, sub-Saharan Africa.
 - Structured complex financings; coordinated with investors & project risk insurers; negotiated loan agreements; monitored loan portfolio.
 - Coordinated new business development with multiple multilateral development banks and private equity funds.