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REINVENTING THE WHEEL: HOW SECURITIZATION CAN BOLSTER THE MARKET FOR RESIDENTIAL ENERGY EFFICIENCY LOANS

JOSEPH GONYEAU*

INTRODUCTION

Currently, one of society's greatest goals is the reduction of greenhouse gases.[1] This goal is generally accepted worldwide, as evidenced by the Paris Climate Agreement, the parties to which agreed to establish frameworks for adopting clean energy and reducing greenhouse gases.[2] After the United States' controversial decision to withdraw from the Paris Agreement,[3] the federal government's future in reducing greenhouse gases remains uncertain. Despite this setback, there are existing programs aimed at reducing greenhouse gases in the United States that the government should ensure succeed.[4] One such program is the Warehouse for Energy Efficiency Loans ("WHEEL").[5]

WHEEL operates as a multistate public-private partnership, sharing resources to provide "unsecured loans to single-family homeowners with credit-score based underwriting and public credit enhancement."[6]

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[1] *See Reducing Greenhouse Gas Emissions*, U.S. ENVTL PROT. AGENCY (Nov. 21, 2016), https://19january2017snapshot.epa.gov/climatechange/reducing-greenhouse-gas-emissions_.html [https://perma.cc/4JF5-UC28].

[2] *See* Camila Domonoske, *So What Exactly Is In The Paris Climate Accord?*, NPR (June 1, 2017, 12:01 PM), https://www.npr.org/sections/thetwo-way/2017/06/01/531048986/so-what-exactly-is-in-the-paris-climate-accord [https://perma.cc/FZ2Y-MQBM].

[3] *See* Valerie Volcovici, *U.S. submits formal notice of withdrawal from Paris climate pact*, REUTERS (Aug. 4, 2017, 5:25 PM), https://www.reuters.com/article/us-un-climate-usa-paris/u-s-submits-formal-notice-of-withdrawal-from-paris-climate-pact-idUSKBN1AK2FM [https://perma.cc/5JWM-ZH9Q].

[4] *See* NAT'L ASSOC. OF STATE ENERGY OFFICIALS (NASEO), WHEEL: A SUSTAINABLE SOLUTION FOR RESIDENTIAL ENERGY EFFICIENCY 1–3, https://www.naseo.org/Data/Sites/1/documents/committees/financing/documents/WHEEL_Primer.pdf [https://perma.cc/G624-NGSE] [hereinafter NASEO].

[5] *See id.*

[6] Elizabeth Bellis, *WHEEL Feasibility Study: India, China, Brazil, UK, and The EU*, ENERGY PROGRAMS CONSORTIUM 1, 13 (Jan. 6, 2017), https://www.climateworks.org/wp-content/uploads/2017/01/EPC-WHEEL-Report.pdf [https://perma.cc/UHJ2-QAYE].

WHEEL's goal is to "increase the rate of retrofitting of the nation's single-family housing stock" in order to bolster home efficiency and thus reduce greenhouse gases.[7] Such retrofitting includes the replacement and upgrade of energy-efficient heating and cooling systems.[8] To achieve this, WHEEL relies on securitization, tapping into the secondary markets to bolster investments in residential energy efficiency loans.[9]

Despite the benefits of WHEEL, the program has been slow to launch.[10] One major problem hindering WHEEL's potential is the Credit Risk Retention Rule (the "Rule") promulgated under Section 15G of the Securities Exchange Act of 1934.[11] The Rule requires WHEEL sponsors to maintain a 5% minimum credit risk interest in any asset they convey to a third party.[12] As a result of this requirement, private WHEEL sponsors will stop providing capital, due to increased risk exposure, and public WHEEL sponsors will continually use their Program Income[13] from WHEEL to ensure that they have adequate capital to meet the risk-retention requirement. This will hinder the growth of energy efficiency loans because WHEEL sponsors would otherwise be able to recycle program income back into WHEEL, ultimately growing the program.[14] Loans secured under the WHEEL program should be exempted from recent Dodd-Frank Risk Retention requirements for three main reasons: (1) WHEEL does not require an additional monitoring incentive; (2) WHEEL meets the rationale for exemption under 15 U.S.C. § 78o-11(e)(2); and (3) advanced institutional investors do not require additional protection.[15]

I. SETTING THE STAGE FOR WHEEL

Promoting energy efficiency is an important societal goal.[16] This Part will introduce the impact of the residential housing sector on

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[7] *Id.*
[8] *Id.* at 14.
[9] *See* NASEO, *supra* note 4, at 1–2.
[10] *See WHEEL's Up For Home Energy Efficiency Loans*, INST. FOR MKT. TRANSFORMATION (Jul. 6, 2015), http://www.imt.org/news/the-current/wheels-up-for-home-energy-efficiency-loans [https://perma.cc/YP43-BN89].
[11] 17 C.F.R. pt. 246 (2014).
[12] PRICEWATERHOUSE COOPERS, NAUGHTY OR NICE: CREDIT RISK RETENTION IS HERE 1, 1 (Dec. 2016), https://www.pwc.com/us/en/financial-instruments-and-credit/publications/assets/Financial-markets-insights-CRR.pdf [https://perma.cc/6386-9M62].
[13] *See generally* NASEO, *supra* note 4, at 1 (describing program income as "[e]xcess cash flows from loan pools backing bonds").
[14] *Id.*
[15] *See* discussion *infra* Sections IV.C–E.
[16] *See Reducing Greenhouse Gas Emissions*, *supra* note 1.

greenhouse gas production. Moreover, this Part will discuss methods to enhance residential energy efficiency, and the lack of current financing options to make residential energy-efficient retrofits.[17]

A. Current Environmental Problems

Promoting energy efficiency is one of the most important goals in society today.[18] The residential sector produces a tremendous amount of direct and indirect greenhouse gas emissions.[19] Direct emissions result from the combustion of petroleum and natural gas used for cooking and heating.[20] Direct emissions are also caused by sending organic waste to landfills and wastewater treatment plants, as well as the use of fluorinated gases in many air conditioning and refrigeration systems.[21] Indirect emissions result from power plants burning fossil fuels which produce the electricity that powers everything in our homes.[22] Together, direct and indirect emissions in the residential building sector produced 981 million metric tons ("MMT") of carbon dioxide ("CO_2") in 2016.[23] Further, as of 2015, total residential CO_2 emissions accounted for about 6% of all emissions among the different sectors.[24] Thus, the data establishes that one way to reduce greenhouse gases in society is to focus on bolstering energy efficiency in the residential sector.

B. Methods to Enhance Residential Energy Efficiency

Homes use most of their consumed energy for lighting, cooling, and heating.[25] Accordingly, energy-efficient retrofits can enable new and existing buildings to utilize less energy while accomplishing the same functions, ultimately bolstering energy efficiency and reducing greenhouse

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[17] *See* Keith Welks, *Pennsylvania's Keystone HELP*, PA. TREASURY DEP'T 16 (2010), https://www1.eere.energy.gov/wip/solutioncenter/pdfs/DOE_Webcast_Presentation_012810.pdf [https://perma.cc/S8R7-SCR2].
[18] *See Reducing Greenhouse Gas Emissions*, *supra* note 1.
[19] *See Sources of Greenhouse Gas Emissions*, U.S. ENVT'L PROT. AGENCY, https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#commercial-and-residential [https://perma.cc/Y27Q-RLE7].
[20] *Id.*
[21] *Id.*
[22] *Id.*
[23] U.S. ENERGY INFO. ADMIN., FEBRUARY 2018 MONTHLY ENERGY REVIEW 183 (Feb. 26, 2018).
[24] EPA, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990–2015 ES1, ES5-ES6, https://www.epa.gov/sites/production/files/2017-02/documents/2017_executive_summary.pdf [https://perma.cc/6H5V-9L8P] (dividing 5,411.4 by 319.6 to obtain 6%).
[25] *Sources of Greenhouse Gas Emissions*, *supra* note 19.

gas emissions.[26] Homeowners have a number of options to bolster energy efficiency in their homes.[27] For example, homeowners may install "better insulation; more energy-efficient heating, cooling, ventilation, and refrigeration systems; efficient fluorescent lighting; passive heating and lighting to take advantage of sunlight; and . . . energy-efficient appliances and electronics."[28] However, upgrades can be quite expensive; for instance, asking about the price of installing a new heating, ventilation, and air conditioning ("HVAC") system is similar to asking, "'how much does a new car cost?'"[29] Installing a new HVAC system can cost over $10,000.[30] So, what options do homeowners have to finance such energy-efficient upgrades?

C. *Current Financing Methods*

Currently, homeowners looking to make energy-efficient improvements have limited financing options.[31] This is especially exacerbated by the fact that homeowners do not traditionally save money for home energy efficiency loans.[32] When it comes to making energy-efficient improvements, most consumers are motivated by the necessity of upgrading appliances such as heating and cooling systems.[33] These reactive consumers comprise 90% of the energy efficiency market and do not make upgrades unless it is necessary.[34] Thus, without saving, most consumers are likely unable to pay cash to make such installations, and are forced to finance their energy-efficient upgrades.[35] Possible financing sources include home equity loans, unsecured bank loans, Property Assessed Clean Energy ("PACE") loans, or the use of credit cards.[36]

Because these retrofits can range in price from $3,000 to $15,000, they are too small for home equity loans.[37] Unsecured bank loans are not

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[26] *See id.*
[27] *See id.*
[28] *Id.*
[29] Timothy Kautz, *HVAC Installation Cost 2017—What's a Fair Price for a New Heating and Air Conditioning Installation?*, ALL SYSTEMS MECHANICAL (Feb. 5, 2016, 4:07 PM), https://asm-air.com/hvac/hvac-installation-cost/ [https://perma.cc/Y9M8-6223].
[30] *Id.*
[31] *See* Welks, *supra* note 17.
[32] *See id.* at 11.
[33] *Id.*
[34] *Id.*
[35] *See id.*
[36] Carol J. Clouse, *WHEEL: Aligning Energy Efficiency and Securitization*, INSTITUTIONAL INV'R (May 27, 2014), https://www.institutionalinvestor.com/article/b14zbkxx08jv0d/wheel-aligning-energy-efficiency-and-securitization#.VYsBiBtVhBc [https://perma.cc/E3R7-PGYA].
[37] Welks, *supra* note 17.

a feasible option because they typically carry high interest rates.[38] Furthermore, borrowers desire longer terms and lower rates than the banks will likely give them.[39] What is more, loans in the $3,000 to $15,000 range are too large for credit cards, which carry high interest rates.[40] Finally, consumers may choose to pursue PACE loans, which offer secured lending from the municipal debt market.[41] Although PACE loans have potential, they are not available in every state, and may see diminished growth in the wake of the Federal Housing Authority's announcement that it will no longer insure mortgages on properties with PACE assessments.[42] In order to alleviate the lack of viable options, the federal government should work toward bolstering other existing programs, such as WHEEL.

II. CONCEPTS UNDERPINNING WHEEL

This Part attempts to distill the basic concepts of securitization and tranching, which are vital to understanding the WHEEL program. Further, the analysis in this Part will delve into the potential benefits of tranching.

A. *Introduction to Securitization*

Securitization has been one of the most controversial and confusing financial tools in the last decade; indeed, "[i]t is generally agreed that securitization's abuses contributed to the global financial crisis . . . ."[43] Securitization is the process of converting illiquid assets into securities.[44] The process begins with the loan "originator," often referred to as the "sponsor."[45] First, homeowners apply for loans from commercial banks or

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[38] Clouse, *supra* note 36.
[39] *See* Welks, *supra* note 17.
[40] *See* Todd Woody, *Wall Street Wants to Lend You Money to Fight Climate Change*, THE ATLANTIC (Apr. 18, 2014), https://www.theatlantic.com/technology/archive/2014/04/wall-street-wants-to-lend-you-money-to-fight-climate-change/360891/ [https://perma.cc/2FCG-KNFK]; *see also* Welks, *supra* note 17.
[41] Clouse, *supra* note 36.
[42] Press Release, U.S. Dep't of Hous. and Urban Dev., FHA To Halt Insuring Mortgages On Homes With PACE Assessments (Dec. 7, 2017), https://www.hud.gov/press/press_releases_media_advisories/2017/HUDNo_17-111 [https://perma.cc/WX3V-HV4L]; *see also* Clouse, *supra* note 36.
[43] Steven L. Schwarcz, *Securitization and Post-Crisis Regulation*, 101 CORNELL L. REV. 115, 117 (2016).
[44] Chris Gallant, *What is securitization?*, INVESTOPEDIA (Nov. 1, 2017, 10:15 AM), https://www.investopedia.com/ask/answers/07/securitization.asp [https://perma.cc/CHN9-KYML].
[45] *See What are Asset-Backed Securities?*, SEC. INDUS. AND FIN. MKTS. ASS'N (SIFMA), http://

other financial institutions, who act as the originators.[46] Typically, as is the case with mortgage-backed securities, the loans are secured by claims against the various properties.[47] The loans created are considered assets in the hands of the originators because they provide the originators the right to the future income streams of the loans via interest payments and repayment of the principal.[48] The problem originators face is the risk that the borrower will not repay the loan.[49] The result is that originators are often stuck holding a loan that might not be repaid for an extended period of time, if at all.[50] Thus, originators often sell their notes for cash, which can in turn be used to originate more loans.[51]

Before selling its notes, the originator identifies the particular assets that it would like to remove from its balance sheet.[52] These specified assets are then pooled into a "reference portfolio."[53] The originator then sells the pool of assets to an issuer, which is typically a special purpose vehicle ("SPV").[54] An SPV is an entity created, typically by a financial institution, specifically for the purpose of purchasing the pooled assets, and realizing "their off-balance-sheet treatment for legal and accounting purposes."[55] Put simply, the SPV enables the originator to remove the reference pool from its books for accounting purposes.[56] Thus, the originator does not retain any legal interest in the assets and the assets are immune from bankruptcy proceedings involving the originator.[57] The issuer finances the purchase of the reference portfolio by using the underlying loans from the pool to issue "tradeable, interest-bearing securities that are sold to capital market investors."[58] On their own, these individual loans might not be worth much to investors, but through the process of securitization, the issuer is able to convert these loans into marketable

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www.investinginbonds.com/learnmore.asp?catid=5&subcatid=16&id=10 [https://perma.cc/GY9K-6CEH] (last visited Jan. 11, 2019) [hereinafter SIFMA].
[46] *See id.*
[47] *See* Gallant, *supra* note 44.
[48] *See id.*
[49] *See id.*
[50] *See id.*
[51] *See id.*
[52] Andreas Jobst, *What is Securitization?*, INT'L MONETARY FUND (IMF) 48 (Sept. 2008), https://www.imf.org/external/pubs/ft/fandd/2008/09/pdf/basics.pdf [https://perma.cc/7Z8R-BR68].
[53] *Id.*
[54] *Id.*
[55] *Id.*
[56] *See id.*
[57] *See* Jobst, *supra* note 52.
[58] *Id.*

securities.[59] These securities are referred to as asset-backed securities ("ABS").[60] An ABS is a general term referring to financial securities which are secured by a pool of underlying assets, namely, the reference pool.[61]

Traditionally, these are assets with stable cash flows.[62] Common examples of ABS include "loans, leases, credit card debt, royalties or receivables."[63] Perhaps the most well-known, and infamous, type of ABS is collateralized by mortgage loans.[64] These are referred to as mortgage-backed securities, but they are essentially a type of asset-backed security.[65] Typically, ABS take the form of bonds or notes requiring the issuer to repay both the principal and any interest payments by a specified date to its creditor, the ultimate capital market purchaser.[66]

Next, the ABS are sold to capital market investors, such as pension funds or hedge funds.[67] To facilitate the transaction, a trustee account may be created to pay the interest on the securities to the investors.[68] Cash flows from the loan payments in the underlying reference pool are used to fund the trustee account.[69] The funds from the account are then used to pay the interest on the ABS to the investors.[70] Investors receive either floating-rate payments or fixed-rate payments, depending on the type of ABS.[71]

B. *Introduction to Tranches*

Before selling the ABS, the issuer may choose to divide the asset pool into several different sections, commonly referred to as "tranches."[72] These specific types of ABS are referred to as collateralized debt obligations ("CDOs").[73] They are referred to as CDOs because the pooled assets are

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[59] *See* SIFMA, *supra* note 45.
[60] Jobst, *supra* note 52, at 49.
[61] *See Asset-Backed Security—ABS*, INVESTOPEDIA, https://www.investopedia.com/terms/a/asset-backedsecurity.asp [https://perma.cc/Q6RK-XNRR].
[62] *See* Jobst, *supra* note 52, at 49.
[63] *Asset-Backed Security—ABS*, *supra* note 61.
[64] *See* Jobst, *supra* note 52, at 49.
[65] *Id.*
[66] *See* SIFMA, *supra* note 45; *see also Note*, INVESTOPEDIA, https://www.investopedia.com/terms/n/note.asp [https://perma.cc/A2XD-XJ6V].
[67] *See* Jobst, *supra* note 52.
[68] *See id.*
[69] *See id.*
[70] *See id.*
[71] *See id.*
[72] *See id.* at 48–49.
[73] *See* Jobst, *supra* note 52, at 49.

debt obligations which ultimately act as collateral.[74] Tranches are "groups of loans with similar characteristics, such as maturity, interest rate, and expected delinquency rate."[75] By splitting the ABS into tranches, issuers are able to reach a broader group of investors because they can create different types of securities based on risk and maturity date.[76] Typically, an ABS will have three tranches: senior, mezzanine, and junior tranches.[77] Each tranche is assigned a debt rating.[78] Returns and losses are allocated to investors based on their tranche, with the highest-rated tranches being paid first.[79] Senior tranches are the least risky because they provide the first right to any income generated by the asset pool.[80] Accordingly, senior tranches are usually given the strongest credit rating of "AAA."[81] Investors in senior tranches typically receive the lowest interest rates because, in the event the ABS declines in value, any losses are absorbed by the lower tranches first.[82] Thus, investors in the senior tranches are more likely to receive a return on their investment.[83] Mezzanine tranches are slightly more risky than senior tranches, and typically carry credit ratings ranging from "AA" to "BB."[84] Junior tranches are the riskiest because any losses to the value of the security are absorbed by junior tranche owners first.[85] In exchange for accepting this risk, the junior tranches pay the highest interest rate to investors.[86]

Tranching acts as a form of credit enhancement by directing losses to different tranches.[87] Because the junior tranches absorb losses

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[74] *Collateralized Debt Obligation—CDO*, INVESTOPEDIA, https://www.investopedia.com/terms/c/cdo.asp [https://perma.cc/32PP-9AXA].
[75] *Asset-Backed Security—ABS*, *supra* note 61.
[76] *See* John Ogg, *CDOs and the Mortgage Market*, INVESTOPEDIA (Oct. 14, 2016, 2:00 PM), https://www.investopedia.com/articles/07/cdo-mortgages.asp [https://perma.cc/95NW-WNE4].
[77] Jobst, *supra* note 52, at 49.
[78] Ogg, *supra* note 76.
[79] *See* Jobst, *supra* note 52, at 49.
[80] *See id.*
[81] Ogg, *supra* note 76.
[82] *See What Is A Senior Tranche?*, WALL STREET OASIS (WSO), https://www.wallstreetoasis.com/finance-dictionary/what-is-a-senior-tranche [https://perma.cc/L9HS-XVD6] (last visited Jan. 11, 2019).
[83] *See id.*
[84] Ogg, *supra* note 76.
[85] *What Is A Junior Tranche?*, WALL STREET OASIS (WSO), https://www.wallstreetoasis.com/finance-dictionary/what-is-a-junior-tranche [https://perma.cc/2V67-QVJL] (last visited Jan. 11, 2019).
[86] *Id.*
[87] FRANK. J. FABOZZI, CAPITAL MARKETS INSTITUTIONS, INSTRUMENTS, AND RISK MANAGEMENT 834 (5th ed. 2015).

first, they provide credit enhancement for the mezzanine tranches; the mezzanine tranches absorb losses after the junior tranches, ultimately providing credit enhancement for the senior tranches.[88]

III. INTRODUCTION TO THE WHEEL PROGRAM

This Part analyzes the origins of the WHEEL program, key participants in the program, and how the program operates. Further, this Part will discuss the benefits of securitization, and how securitization enables WHEEL to offer lower interest rates. The WHEEL program has successfully issued over 2,000 loans[89] and led to tremendous environmental benefits.[90] Despite these benefits, the WHEEL program has been slow to develop.[91] This Part will also analyze some of the possible underlying reasons behind this.

A. History

The WHEEL is an independent organization designed to provide "low cost, large scale capital for state and local government and utility-sponsored residential energy efficiency loan programs."[92] WHEEL traces its origin back to 2005, when the Pennsylvania Treasury Department noticed consumers were struggling to find affordable financing options for home energy efficiency improvements.[93] One year later, the Pennsylvania Treasury Department teamed up with AFC First, a specialty energy lender, and created the Keystone Home Energy Loan Program ("Keystone HELP").[94]

The Pennsylvania Treasury invested state funds in Keystone HELP, while AFC First administered the loans and oversaw a network

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[88] *See id.*
[89] STATE & LOCAL ENERGY EFFICIENCY ACTION NETWORK (SEE ACTION), DEP'T OF ENERGY (DOE), ENERGY EFFICIENCY FINANCING FOR LOW- AND MODERATE-INCOME HOUSEHOLDS: CURRENT STATE OF THE MARKET, ISSUES, AND OPPORTUNITIES 35 (Aug. 2017), https://emp.lbl.gov/sites/default/files/lmi-final0914.pdf [https://perma.cc/6X32-BD4B] [hereinafter SEE ACTION, FINANCING].
[90] *See generally* Bellis, *supra* note 6, at 7 (estimating that an issuance could save a total of 92,562 MWh of energy).
[91] *Green securitisation: harnessing institutional investment to tackle climate change*, STRUCTURED CREDIT INVESTOR (SCI) 1, 15 (2016), http://www.structuredcreditinvestor.com/pdfs/SCI_2016_Guide_to_Renewables_ABS_Web-2.pdf [https://perma.cc/HQ4Y-E5CU] [hereinafter SCI].
[92] NASEO, *supra* note 4, at 1.
[93] *See* Welks, *supra* note 17, at 3.
[94] *See id.* at 3, 5.

of program-approved contractors.[95] The goal was to make it as easy as possible for contractors to provide low-interest loans to homeowners seeking energy efficiency improvements.[96] Homeowners dealt directly with the approved contractors, who would originate the loan and provide the energy-efficient improvements.[97] AFC First would act as a lender, providing interim financing and acquiring the loans from the contractors.[98] The Pennsylvania Treasury would then purchase the loans and receive a return on the loan payments.[99] The Pennsylvania Treasury relied on state grant opportunities to help defray the losses from non-performing loans.[100]

By 2010, Keystone HELP had proven to be a tremendous success and garnered national attention.[101] The Pennsylvania Treasury Department had financed more than $30 million of energy efficiency loans and held $20 million of the loans.[102] Further, the Treasury had consistently earned a return of close to 8% and suffered minimal loan losses of 1%.[103] However, as the Treasury accumulated more of these loans, it began to reach its diversification limits and was unable to purchase more loans from AFC First.[104] The demand for the loans was so great that the funding needed to meet the demand threatened to violate the Pennsylvania Treasury's portfolio diversification limits.[105] Pennsylvania tried to sell its portfolio of energy efficiency loans; however, there was no market for these unfamiliar energy efficiency loans.[106] Fannie Mae was the only prospective buyer, but would only buy the loans at a serious discount.[107] Pennsylvania considered securitizing its portfolio of energy efficiency loans and selling them in the capital markets, but soon realized that the Keystone HELP program was not large enough on its own to create an asset class liquid enough to attract investors.[108] Thus, in 2009, the Pennsylvania Treasury Department began working with the Energy Programs Consortium ("EPC"), the National Association of State Energy

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[95] *See id.* at 3–5.
[96] *See id.* at 3.
[97] *See id.* at 4–5.
[98] *See id.* at 4.
[99] *See* Welks, *supra* note 17, at 4–5, 7.
[100] *See id.* at 4–5.
[101] *See id.* at 8.
[102] *Id.*
[103] *See id.* at 7.
[104] *See id.* at 8.
[105] *See* Bellis, *supra* note 6, at 14.
[106] *Id.*
[107] *Id.*
[108] *See id.*

Officials ("NASEO"), and Forsyth Street Advisors to create a "national unsecured residential energy efficiency loan product."[109]

In 2010, the groups created the WHEEL program, an independent organization focused on providing affordable capital to state and municipal residential energy efficiency loan programs.[110]

B. *Key Participants*

As a public-private partnership, WHEEL involves a number of different private institutions, foundations, and government organizations.[111] The EPC is a non-profit whose goal is to coordinate energy policies and programs among different government organizations.[112] EPC is a joint venture among four groups: The National Association of State Community Services Programs ("NASCSP"), the NASEO, the National Association of State Regulatory Utility Commissioners ("NARUC"), and the National Energy Assistance Directors' Association ("NEADA").[113] EPC's job is to coordinate work between NASEO, the United States Department of Energy ("DOE"), and the National Renewable Energy Laboratory ("NREL") "to provide model documents" regarding the development and operation of "renewable finance and bond programs."[114]

Other participants include Citigroup Global Markets, Inc.,[115] which provides the warehousing facility;[116] Renew Financial, which provides the loans under the WHEEL program;[117] and RenewFund Finance, Renew Financial's wholly owned subsidiary.[118] RenewFund Finance originates the loans and manages the network of contractors within each state's WHEEL program.[119] Other participants include sponsors such as the New York

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[109] *Id.* at 13.
[110] *See* NASEO, *supra* note 4, at 1.
[111] *See* Bellis, *supra* note 6, at 13.
[112] *Id.* at 1.
[113] *Id.*
[114] *Id.*
[115] *See* NASEO, *supra* note 4, at 1.
[116] *Energy efficiency 2016: Renew Financial and Citi*, ENVTL. FIN. (Mar. 23, 2016), https://www.environmental-finance.com/content/deals-of-the-year/energy-efficiency-2016-wheel.html [https://perma.cc/8H4C-AS4N].
[117] *See id.*
[118] NY GREEN BANK, EXPANDING AVAILABILITY OF RESIDENTIAL ENERGY EFFICIENCY LOANS TO HOMEOWNERS THROUGHOUT NEW YORK STATE 1,1 (May 2017).
[119] *See id.* at 2.

Green Bank ("NYGB")[120] and Keystone HELP, both of which have provided capital to the WHEEL program.[121]

C. *How WHEEL Works*

WHEEL operates as a public-private partnership between foundations, states, and the private sector, sharing resources for the benefit of society.[122] WHEEL seeks to bolster the retrofitting of the single-family housing stock in the United States and ultimately reduce greenhouse gas emissions.[123] WHEEL aims to achieve this goal by "creat[ing] a secondary market for residential clean energy loans . . . ."[124] So, how does the WHEEL program tap into the secondary markets?

First, the sponsors of energy efficiency loan programs in participating states transfer their public funds, either American Recovery and Reinvestment Act ("ARRA") funds or other public funds, to a custodial account at Renew Financial.[125] Next, financial institutions such as Citigroup provide the initial funding to the WHEEL warehouse.[126] Renew Financial acts as the servicer and originator of the loans and manages the network of approved contractors in each sponsor's jurisdiction.[127] When a homeowner desires to make an energy-efficient upgrade to their home, they reach out to one of the approved contractors managed by Renew Financial.[128] Utilizing both the original warehouse financing that Citigroup used to fund the WHEEL (the private funds), and the sponsors' funds from various programs (the public funds), Renew Financial originates the unsecured energy efficiency loans in each sponsor's jurisdiction.[129] The loans are then placed into the WHEEL warehouse, which is managed by Citigroup.[130] While in WHEEL, the portfolio of loan receivables is securitized

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[120] *Id.* at 1.
[121] NASEO, *supra* note 4, at 3.
[122] *See* Bellis, *supra* note 6, at 13.
[123] *Id.*
[124] NASEO, *supra* note 4, at 1.
[125] *Id.* at 2.
[126] *See* NY GREEN BANK, *supra* note 118, at 1–2.
[127] *Id.* at 2.
[128] *See id.*
[129] *See* Cisco Devries, *Warehouse for Energy Efficiency Loans*, Address at US DOE Better Buildings Summit 51 (May 27, 2015), https://betterbuildingssolutioncenter.energy.gov/sites/default/files/Wednesday%20-%20Accessing%20Secondary%20Markets%20to%20Stimulate%20Financing%20for%20Energy%20Efficiency%20Investments%20%281%29.pdf [https://perma.cc/2UF8-DQQW] (citing to slide titled "WHEEL Financing: How it Works").
[130] *See* NASEO, *supra* note 4, at 1–2; *see also U.S. Homeowners to Benefit from Groundbreaking Home Energy Loan Financing Platform*, RENEW FIN. (June 15, 2015), https://

by aggregating the loans into diversified pools until they are large enough to support the issuance of a rated ABS.[131]

The proceeds from the sale of the securities to capital markets investors are first used to reimburse Citigroup, who provided the warehouse line of credit that was used to help purchase the loan receivables.[132] Any additional proceeds from the sale of the securities are used to recapitalize the WHEEL in order to support Renew Financial's purchase of future loan receivables into WHEEL.[133] Eventually, WHEEL will be entirely funded by the sale of ABS.[134] Revenues from the ABS loan pool will be used to pay off the capital market investors.[135] Once these investors are paid off, any additional revenues from the loan pool will be redistributed to the sponsors as Program Income.[136] The amount of Program Income paid to each sponsor is dependent on its contribution relative to the size and overall performance of the entire loan pool.[137] Program Income may be recycled back into WHEEL to support the purchase of future energy efficiency loan receivables in the sponsor's jurisdiction, so as to grow the program further, or reallocated for different uses.[138]

D. *Benefits of Securitizing Energy Efficiency Loans*

Securitization is an extremely useful tool; indeed, despite its role in the 2008–2009 financial crisis, securitization in the United States has rebounded because no tool has been created that delivers the same benefits.[139] Specifically, securitizing energy efficiency loans attracts investors, which ultimately decreases the cost of capital and reduces interest rates for borrowers of these energy efficiency loans.[140] Securitization does this by creating the necessary liquidity to attract more investors to this asset class; enabling investors to invest based on their risk profiles; and creating historical performance data, which is necessary for accurate risk assessment.[141]

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renewfinancial.com/resources/us-homeowners-benefit-groundbreaking-home-energy-loan-financing-platform [https://perma.cc/7VPN-XJP2].

[131] *See* Clouse, *supra* note 36; *see also* NASEO, *supra* note 4, at 1–2.
[132] *See* NASEO, *supra* note 4, at 2.
[133] *See id.* at 1.
[134] *See* NY GREEN BANK, *supra* note 118, at 2.
[135] *See* NASEO, *supra* note 4, at 1–2.
[136] *Id.*
[137] *Id.* at 2.
[138] *Id.*
[139] *See* Bellis, *supra* note 6, at 11.
[140] *See id.*
[141] *See id.*

First, securitization creates the liquidity necessary to attract more investors to energy efficiency loans.[142] Liquidity refers to how easily "an asset or security can be quickly bought or sold in the market without affecting the asset's price."[143] Investors prefer highly liquid assets because the more liquid an asset is, the more quickly and easily it can be turned into cash, enabling investors to seamlessly enter and exit new investment positions.[144] Traditionally, individual loans such as mortgages are illiquid assets that investors are uninterested in due to the risk of default associated with owning an individual loan.[145] Accordingly, banks are stuck holding these individual loans on their books, which prevents them from originating more loans.[146] Securitization enables a financial institution to convert multiple loans into a liquid asset that attracts investors, thus creating a market for these loans.[147] This enables banks to sell the loans to issuers such as Citigroup, providing them with the capital they need to originate more loans.[148]

Second, securitization is able to further attract investors because it allows them to "diversify their risk by taking a small piece of many loans rather than a large piece of a smaller number of loans."[149] When the loans are divided into tranches, investors are able to choose which tranche of the loans they invest in based on their risk preferences.[150] Risk-averse investors can choose to invest in senior tranches, albeit for a lower yield.[151] Conversely, investors who are inclined to take on more risk may invest in mezzanine and subordinate tranches.[152] Such tranches are subject to greater risk since they absorb the first losses associated with the default of underlying borrowers, but investors are compensated

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[142] *See id.*
[143] *Liquidity*, INVESTOPEDIA, https://www.investopedia.com/terms/l/liquidity.asp [https://perma.cc/AQ8U-QW93].
[144] *See* Miranda Marquit, *Investing Basics: Why Liquidity Matters*, U.S. NEWS & WORLD REP. (Dec. 3, 2012, 8:36 AM), https://money.usnews.com/money/blogs/the-smarter-mutual-fund-investor/2012/12/03/investing-basics-why-liquidity-matters [https://perma.cc/8N6K-U3EE].
[145] *See How does securitization increase liquidity?*, INVESTOPEDIA, https://www.investopedia.com/ask/answers/042115/how-does-securitization-increase-liquidity.asp [https://perma.cc/EJH8-HBJZ].
[146] *See* Bellis, *supra* note 6, at 11.
[147] *See How does securitization increase liquidity?*, *supra* note 145.
[148] *See* Bellis, *supra* note 6, at 11; *see also* NASEO, *supra* note 4, at 1–2.
[149] Bellis, *supra* note 6, at 11.
[150] *Id.*
[151] *Id.*
[152] *See id.*

for this risk through greater yields.[153] By providing investors investment options that align with their risk preferences, securitizing energy efficiency loans will attract more potential investors.[154] Furthermore, each successful securitization will provide valuable performance data on the success of the underlying loans.[155] As the market becomes more familiar with the default rates on energy efficiency loans, investors will be able to more accurately and efficiently price the risks involved with this new asset class, decreasing the required rate of return.[156]

WHEEL is predominately able to offer lower interest rates and attract investors by using subordinate capital as a form of credit enhancement.[157] Most energy efficiency loans offer below-market rates to encourage more energy-efficient retrofits.[158] The problem that arises is that these lower rates may not attract secondary market investors, who are seeking competitive, market-rate returns.[159] In order to compensate investors, participating energy efficiency programs need to offer credit enhancement.[160] Participating energy efficiency programs do this by contributing subordinated capital to the WHEEL.[161] This subordinate capital attracts investors because it will be used to absorb the first losses in the loan pool,[162] ultimately providing credit enhancement by shielding private capital from riskier tranches.[163] Assuming that a loss is not incurred on the subordinated capital, program sponsors will then earn a return on their investment in the form of Program Income.[164]

Accordingly, securitization attracts investors to energy efficiency loans by bolstering liquidity; offering investors the benefit of diversification; providing performance data, which is vital for risk assessment; and mitigating risk through subordinated capital.[165] By attracting more

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[153] *See id.*
[154] *See id.*
[155] *See* NY GREEN BANK, *supra* note 118, at 1.
[156] *See id.*
[157] STATE & LOCAL ENERGY EFFICIENCY ACTION NETWORK (SEE ACTION), ACCESSING SECONDARY MARKETS AS A CAPITAL SOURCE FOR ENERGY EFFICIENCY FINANCE PROGRAMS: PROGRAM DESIGN CONSIDERATIONS FOR POLICYMAKERS AND ADMINISTRATORS 21 (Feb. 2015), https://www4.eere.energy.gov/seeaction/system/files/documents/secondary_markets_0.pdf [https://perma.cc/BSP5-7TWR] [hereinafter SEE ACTION, ACCESSING].
[158] *Id.* at 25.
[159] *See id.*
[160] *See id.*
[161] *Id.* at 21.
[162] *See id.*
[163] *See* SEE ACTION, ACCESSING, *supra* note 157, at 34.
[164] *See id.* at 35 (referring to tbl.5); *see also* NASEO, *supra* note 4, at 1–2.
[165] *See* Bellis, *supra* note 6, at 11; *see also* NASEO, *supra* note 4, at 1–2.

investors, WHEEL is able to issue more ABS for sale to capital markets investors.[166] The proceeds from the sales will be used to recapitalize the WHEEL, ultimately increasing the supply of capital that Renew Financial can use to originate more energy efficiency loans.[167] Ultimately, through securitization and credit enhancement, interest rates on loans will decrease, and it will cost less for borrowers to make energy-efficient upgrades on their homes.[168] Reduced borrowing costs will encourage homeowners to make more energy-efficient upgrades, which will decrease the demand for energy and reduce greenhouse gas emissions.[169]

E. WHEEL in Action

WHEEL offers personal loans for residential energy-efficient upgrades.[170] One of the major benefits of the WHEEL program is that states and municipal governments looking to bolster residential energy efficiency loans in their jurisdictions do not need to create their own program.[171] Instead, they simply supply capital to WHEEL, and Renew Financial manages a network of approved contractors in the sponsor's jurisdiction.[172] Specifically, WHEEL offers loans ranging from $1,000 to $20,000, for terms of three, five, seven, or ten years.[173] Loans are provided based on homeowners' FICO scores, with the minimum permissible FICO score set at 640.[174] The loans may be used for everything from HVAC replacement to retrofits with "combined solar, water and energy efficient improvements."[175] The application process for loans is designed to be as simple as possible.[176] For instance, applications may be done over the phone or online, with approval as quickly as in a few hours.[177]

Energy-efficient improvements create substantial economic and environmental benefits: for every $1 million invested into WHEEL, an

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[166] *See* NASEO, *supra* note 4, at 1–2.
[167] *See id.*
[168] *See* Bellis, *supra* note 6, at 11.
[169] *See id.*
[170] *See* Devries, *supra* note 129, at 51 (citing to the slide titled "Wheel Financing: How it Works").
[171] *See id.* at 46 (citing to the slide titled "WHEEL Overview").
[172] *See id.* at 48 (citing to the slide titled "WHEEL Principles: Uniform Underwriting, Qualified Contractors & Qualified Projects").
[173] *See id.*
[174] *See id.*
[175] *Id.*
[176] SEE ACTION, FINANCING, *supra* note 89, at 35.
[177] *Id.*

estimated 625 projects valued at $8,000 each will be started.[178] Further, it is projected that for every $1 million invested into WHEEL, 100 jobs will be created.[179] Moreover, every $1 million invested into WHEEL will also lead to substantial environmental benefits.[180] It is projected that such an investment will save 750 megawatt hours ("MWh") of electricity, 40,000 therms of natural gas, 10,000,000 gallons of water, and 700 metric tons of CO_2 annually.[181]

Thus far, the WHEEL program has issued over 2,000 unsecured loans totaling over $19 million among New York, Pennsylvania, Kentucky, Ohio, and Florida.[182] WHEEL completed the world's first securitization of energy efficiency loans in 2016,[183] consisting of 2,079 loans from Pennsylvania, Kentucky, and Cincinnati, Ohio.[184] The loans involved in the securitization were issued between June 2006 and September 2015.[185] The loans involved ranged in size from $1,452 to $15,000, and were used on projects including: ventilation system installation, boiler replacement, central air replacement, furnace replacement, insulation installation, new thermostat installation, water heater replacement, and window improvement.[186] Together, Citigroup and Renew Financial issued $12.58 million in the form of ABS "backed by pools of residential energy efficiency loans."[187] Calvert Investment Management purchased the single A-rated tranche.[188] The tranche was "backed by loans with a maximum maturity of 10 years."[189] Renew Financial estimates that the securitization saved a total of 92,561 MWh of energy, thus avoiding a total of 57,318 tons of

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[178] *See* Devries, *supra* note 129, at 52.
[179] *See id.*
[180] *See id.*
[181] *Id.*
[182] SEE ACTION, FINANCING, *supra* note 89.
[183] ENVTL. FIN., *supra* note 116.
[184] Elizabeth Bellis, *Energy Efficiency Loans for Low and Moderate Income Households: The Warehouse for Energy Efficiency Loans (WHEEL) as a Case Study*, ENERGY PROGRAMS CONSORTIUM (EPC) 1, 6–7 (Sept. 2016), http://docketpublic.energy.ca.gov/PublicDocuments/16-OIR-02/TN213848_20160929T154149_Colin_Bishopp_Comments_Innovative_Financing_Pilot.pdf [https://perma.cc/J52M-773M].
[185] *Id.* at 7.
[186] *Id.*
[187] *Citi and Renew Financial Announce First Ever Energy Efficiency Loan Asset-Backed Security Transaction*, BUSINESSWIRE (June 15, 2015, 12:30 PM), https://www.businesswire.com/news/home/20150615006147/en/Citi-Renew-Financial-Announce-Energy-Efficiency-Loan [https://perma.cc/AZ2W-AGP2].
[188] *IFR: Citi sells first Green ABS bond of consumer loans*, RENEW FINANCIAL (June 18, 2015), https://renewfinancial.com/resources/ifr-citi-sells-first-green-abs-bond-consumer-loans [https://perma.cc/7GYG-RJQU].
[189] *Id.*

greenhouse gases.[190] Current WHEEL Members include the New York Green Bank,[191] Pennsylvania's Keystone Home Energy Loan Program, the Greater Cincinnati Energy Alliance, the Commonwealth of Kentucky, the Commonwealth of Virginia, and Florida.[192]

WHEEL has yet to complete any additional securitizations; in 2015, however, the New York Green Bank pledged $20 million in subordinate capital to WHEEL.[193] The subordinated capital, along with the warehouse financing provided by Citi, will be used to purchase New York State residential energy efficiency loan receivables.[194] The New York Green Bank hopes that the program will support residential energy efficiency improvements while simultaneously bolstering a young asset class in residential energy efficiency receivables.[195] The funds were used to offer loans of up to $20,000, with durations of up to ten years.[196] Under New York's program, the funds will be used to pay contractors to install "Energy Star appliances; qualified indoor and outdoor lighting fixtures and light bulbs; qualified heating, ventilation and air conditioning improvements; certain water conservation measures; qualified windows, skylights and doors; certain air sealing and insulation measures; [and] energy monitoring and metering systems."[197]

The New York Green Bank forecasts that the energy efficiency improvements will lead to huge energy savings.[198] For instance, it projects a low lifetime savings of 396,000 MWh in electricity, and a potential maximum savings of 421,000 MWh in electricity.[199] Further, its lifetime low estimate of fuel savings is 5,540,000 MMBtu, with a high estimate of 6,020,000 MMBtu.[200] Ultimately, the New York Green Bank estimates a massive reduction in greenhouse gases from these energy efficiency improvements.[201] Its low estimate on greenhouse gas reductions is 570,000 metric

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[190] Bellis, *supra* note 6, at 7.
[191] *See* NY GREEN BANK, *supra* note 118, at 1.
[192] *Renew Financial Acquires AFC First, Leading Energy Efficiency Lender*, PR NEWSWIRE (Oct. 7, 2015, 9:00 AM), https://www.prnewswire.com/news-releases/renew-financial-acquires-afc-first-leading-energy-efficiency-lender-300155402.html [https://perma.cc/7RS4-PUE3].
[193] *See* NY GREEN BANK, *supra* note 118, at 1.
[194] *Id.*
[195] *See id.*
[196] *Id.* at 2.
[197] *Id.* at 2–3.
[198] *See id.* at 3.
[199] *See* NY GREEN BANK, *supra* note 118, at 3.
[200] *Id.*
[201] *See id.*

tons, with a high estimate of 605,000 metric tons.[202] Given WHEEL's obvious benefits for the environment, homeowners, and capital markets investors, what has held WHEEL back?

F. Why Has WHEEL Been Slow?

One of the reasons that the WHEEL program has been slow to develop is market uncertainty over the riskiness of the underlying energy efficiency loans.[203] Unsecured residential energy efficiency loans are a relatively young asset class, and there is not much data available on the performance of these loans.[204] Despite the first successful securitization in 2015, "[i]t can take three to seven years of loan history for rating agencies to fully evaluate the credit of a portfolio."[205] Once enough performance data is gathered, ratings agencies will be able to more accurately reflect the risk of unsecured energy efficiency loans.[206] More accurate prices will ultimately instill investor confidence in WHEEL, leading to an increase in investment.

Another likely reason that the WHEEL program has been slow to develop is the involvement of public sponsors.[207] WHEEL is partially funded by public agency sponsors, and such sponsors are subject to political processes and government approval.[208] Obtaining approval to provide public funds to WHEEL can be a very time-consuming process.[209] Moreover, this process is likely slowed even further by the current uncertainty over the success of these underlying loans.[210] Furthermore, WHEEL securitizations have also likely been hindered by the fact that WHEEL loans must be aggregated until they meet the size requirements of the capital markets.[211] Market uncertainty, paired with the tedious

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[202] *Id.*
[203] *See* SCI, *supra* note 91, at 15.
[204] Charlotte Kim et al., *Innovations and Opportunities in Energy Efficiency Finance*, WILSON SONSINI GOODRICH & ROSATI 1, 21 (May 2014), https://www.wsgr.com/publications/PDFSearch/WSGR-EE-Finance-White-Paper.pdf [https://perma.cc/AU24-V57V].
[205] *Id.*
[206] *See id.*
[207] *See id.* at 20.
[208] *Id.*
[209] *Id.*
[210] *See* SCI, *supra* note 91, at 15.
[211] Sean Kidney, *Deep-dive into recent green ABS: Toyota funds EVs & hybrids / WHEEL from Citi & Renew Financial for hoe energy efficiency loans / solar ABS from Sunrun*, CLIMATE BONDS INITIATIVE (Jul. 12, 2015), https://www.climatebonds.net/2015/07/deep-dive-recent-green-abs-toyota-funds-evs-hybrids-wheel-abs-citi-renewfinancial-home [https://perma.cc/A9AR-2EGT].

process of seeking governmental approval, has likely made it much more difficult to reach the aggregate amount of loans necessary to spark interest in the capital markets. Although uncertainty over the riskiness of the energy efficiency loans, the involvement of public sponsors, and the requirement to aggregate enough loans to attract institutional investors have likely held WHEEL back, they are not WHEEL's greatest problem.[212]

IV. THE DODD-FRANK RISK RETENTION RULE SHOULD NOT APPLY TO SECURITIZED ENERGY EFFICIENCY LOANS UNDER THE WHEEL PROGRAM

This Part analyzes the application of the Dodd-Frank Credit Risk Retention Rule ("the Rule") to the WHEEL program. Sponsors such as Renew Financial and other suppliers of private capital will be forced to retain a 5% interest in each tranche of all issued ABS interests.[213] This will ultimately expose the sponsors to more risk than originally allotted under the program.[214] Exposing companies such as Renew Financial to extra risk will deter private capital from joining WHEEL, unless interest rates on these loans are increased to compensate the sponsors for this risk.[215] Increasing interest rates would deter homeowners from taking loans out via WHEEL, and failure to raise rates would scare away private capital, without which there would not be enough funds in WHEEL to purchase loans for aggregation.[216] Either way, the Rule acts as a roadblock, and will ultimately kill the WHEEL program. Securitized energy efficiency loans under the WHEEL program should be exempt from the Rule because 1) WHEEL loans do not need an extra monitoring incentive, 2) the rationale for exempting community-focused loans also applies to WHEEL loans, and 3) institutional investors are sophisticated and do not require additional protection.[217]

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[212] *See* SCI, *supra* note 91; *see also* Kim et al., *supra* note 204, at 20; Kidney, *supra* note 211.

[213] *See Guide to the Credit Risk Retention Rules for Securitizations*, MORGAN LEWIS 1, 7 (Feb. 20, 2018), https://www.morganlewis.com/~/media/files/handouts/final_risk_retention_guide_handout.ashx [https://perma.cc/T88X-LWC4].

[214] *See* SEE ACTION, ACCESSING, *supra* note 157, at 21, 33–34.

[215] *See id.* at 5 (WHEEL provides credit enhancement via public funds in order to compensate private funds for risk; however, the Rule effectively eliminates the credit enhancement, exposing the private capital to more risk).

[216] *See* discussion *infra* Section IV.B.

[217] *See* discussion *infra* Sections IV.C–E.

A. Creation of the Risk-Retention Rule

Section 941(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act directed The Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Federal Finance Housing Agency, the Department of Housing and Urban Development ("Federal Banking Agencies") and the Securities and Exchange Commission ("SEC") to promulgate a rule which requires securitizers of ABS to maintain a 5% minimum credit risk interest in any asset they convey to a third party.[218] Accordingly, the SEC and Federal Banking Agencies implemented a joint final rule, The Dodd-Frank Credit Risk Retention Rule, in October 2014.[219]

The Rule for ABS became effective on December 24, 2016, and requires sponsors to retain a 5% minimum credit risk in their securitizations.[220] The rule aims to align the interests of sponsors and investors.[221] It does so by incentivizing issuers to monitor loans through their retained credit risk, which encourages investors to issue better quality loans.[222]

B. Application to WHEEL

Although it may not be clear at the outset, WHEEL members will be affected by the Rule. The Rule defines "asset-backed security" as a "fixed-income or other security collateralized by any type of self-liquidating financial asset (including a loan, a lease, a mortgage, or a secured or unsecured receivable) that allows the holder of the security to receive payments . . . from the asset . . . ."[223] The loans in WHEEL are unsecured residential energy efficiency loans which are originated in the sponsors' programs and clearly qualify as ABS under 15 U.S.C. § 78c(a)(77).[224] A bit more nebulous, however, is the question of who qualifies as a sponsor under the Rule.[225] Under Section 15G of the Exchange Act, risk retention

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[218] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 941(b), 124 Stat. 1376 (2010) (codified as amended at 15 U.S.C. § 78o-11(c)(1)(B)(i)) (amending the Securities and Exchange Act of 1934 to include Section 15G).
[219] SEC ET AL., Credit Risk Retention Final Rule (Oct. 2014), https://www.sec.gov/rules/final/2014/34-73407.pdf [https://perma.cc/63GN-V99Y].
[220] PRICEWATERHOUSE COOPERS, *supra* note 12.
[221] *Id.*
[222] Cassandra Jones Havard, *Too Conflicted to Be Transparent: Giving Affordable Financing Its 'Good Name' Back*, 20 N.Y.U. J. LEGIS. & PUB. POL'Y 451, 489 (2017).
[223] 15 U.S.C. § 78c(a)(79).
[224] *See* NASEO, *supra* note 4, at 1–3.
[225] Charles A. Sweet, *Credit Risk Retention: Who Is The Sponsor of a Securitization?*,

requirements are imposed on any ABS "securitizer," including the sponsor.[226] The Rule defines a sponsor as "a person who organizes and initiates an asset-backed securities transaction by selling or transferring assets, either directly or indirectly, including through an affiliate, to the issuer."[227] In commentary included with the adoption of the rules, the agencies clarified factors to consider in identifying a sponsor.[228] Specifically, these factors include whether the sponsor is transferring the receivables to the issuing entity, taking an active role in the selection of assets to be securitized, and actually selecting the assets on its own initiative, as opposed to acting "at the direction of a third party or acting solely as a 'rubber stamp.'"[229]

Based on this language, financial institutions such as Renew Financial qualify as sponsors under the Rule; Renew takes an active role in originating the loans to be included in the securitization, manages the contractor network of participating programs, and also services the loans.[230] Moreover, government sponsored programs, such as Keystone HELP, will likely qualify as sponsors under the rule as well. These programs provide funds to WHEEL which are used to purchase loans arising in their jurisdiction.[231] Although they do not appear to have an active role in the selection of assets, they may be considered sponsors because participating programs have the "flexibility to design their programs to reflect local priorities."[232] This provides Renew with guidelines on how to originate loans.[233] Accordingly, under WHEEL, government programs such as Keystone HELP likely qualify as sponsors.

Qualifying Renew Financial and participating government programs as sponsors under the Rule will devastate the WHEEL program. As it relates to Renew Financial, Renew would have a number of options to comply with risk retention; however, regardless of the method, the Rule will discourage private capital from entering the program.[234] Without the private capital, WHEEL cannot provide low-cost energy efficiency loans and is

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MORGAN LEWIS 1, 5 (Sept. 16, 2016), https://www.morganlewis.com/pubs/credit-risk-retention-who-is-the-sponsor-of-a-securitization [https://perma.cc/M66Q-GKAM].

[226] *Id.*

[227] SEC ET AL., Credit Risk Retention Final Rule (Oct. 2014) at 159–60.

[228] *See* Sweet, *supra* note 225, at 32–33; *see also* SEC ET AL., Credit Risk Retention Final Rule (Oct. 2014).

[229] Sweet, *supra* note 225; *see also* SEC ET AL., Credit Risk Retention Final Rule (Oct. 2014) at 32–34.

[230] *See* NY GREEN BANK, *supra* note 118, at 2.

[231] See NASEO, *supra* note 4, at 2.

[232] *Id.*

[233] *See id.* at 1–2.

[234] *See* Sweet, *supra* note 225, at 7.

ultimately killed.[235] First, Renew could satisfy the requirement through vertical or horizontal retention.[236] Vertical retention would require Renew to retain a security representing at least 5% of each tranche.[237] Horizontal interest would require Renew to maintain an "'eligible horizontal residual interest' in the issuing entity in an amount equal to at least 5% of the fair value of all ABS interests issued as part of a securitization transaction."[238] Regardless of the method, the result is that Renew is exposed to more risk in the junior tranches. This will deter private capital and other companies like Renew from entering the WHEEL program; the dominant reason these companies offered their funds is the subordinated capital provided by government-sponsored programs.[239] The public funds are subordinated and thus operate as a form of credit enhancement.[240] The "[s]ubordinated capital is placed in a first loss position to protect more senior investors."[241] Usually, investors in subordinated capital require higher returns in order to compensate them for this risk; however, in the context of energy efficiency loans, the government-sponsored programs demand lower returns so as to bolster the yields to more senior investors.[242] The result of the Rule is that suppliers of private capital are now exposed to more risk, without bolstering their returns. With the Rule, the only way to attract investors would be to increase interest rates on these energy efficiency loans; however, doing so would drive loan consumers away from the WHEEL program. In essence, this defeats the purpose of providing public funds in the first place. Public funds are designed to attract private capital by mitigating risk because they will absorb the first losses to the loan pool.[243] This helps shield private capital from riskier tranches of the pool.[244] The Rule circumvents WHEEL's design, exposing private capital to more risk without offering a greater return. Thus, the Rule will deter private investors and ultimately kill the program, if it has not done so already.

Further, if participating government programs are considered sponsors, they will also be deterred from entering the program. The Rule prohibits the sale of the risk-retention interest held by sponsors.[245]

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[235] *See* SEE ACTION, ACCESSING, *supra* note 157, at 10.
[236] *See* Sweet, *supra* note 225, at 7.
[237] *Id.*
[238] *Id.*
[239] *See* SEE ACTION, ACCESSING, *supra* note 157, at 21, 33–34.
[240] *Id.* at 34.
[241] *Id.*
[242] *Id.*
[243] *See* Bellis, *supra* note 6, at 15–16.
[244] *See id.*
[245] PRICEWATERHOUSE COOPERS, *supra* note 12.

Accordingly, public sponsors in the WHEEL will increasingly need capital in order to fund the risk-retention interest over time.[246] One of the major benefits of WHEEL is that sponsors such as Keystone HELP receive Program Income from the remaining cash flows of the loan pool.[247] Sponsors are given quite a bit of flexibility and may either use this income to support future energy efficiency loans in their jurisdiction or reallocate it for other purposes.[248] However, if sponsors are not exempt from the Rule, they will be forced to continually use a portion of their income to meet the credit risk requirement, instead of growing their loan programs. This will obviously hinder the growth of energy efficiency loans in each sponsor's jurisdiction, which will in turn limit the ultimate reduction of carbon emissions. Ultimately, the effects of the Rule will be devastating to the WHEEL program, deterring vital private capital, and possibly discouraging government programs from joining WHEEL in the first place.

C. WHEEL Does Not Require an Additional Monitoring Incentive

The Dodd-Frank Risk Retention Rule should not apply to securitized energy efficiency loans for a number of reasons. First, the rationale for the Rule is to encourage issuers to monitor loans with the ultimate goal of preventing risky loans;[249] however, the WHEEL program does not need an extra monitoring incentive. As the energy efficiency loans are unsecured, WHEEL only offers these loans to individuals with a minimum FICO score of 640.[250] Also, as of 2014, energy efficiency loans had significantly outperformed other types of unsecured consumer loans, "with annual overall delinquency and losses of about 1 percent."[251] Peter Krasja, CEO of AFC First, asserts that the reason for such low delinquency rates is because these loans are taken by "thinking consumers," borrowers who are looking to make long-term improvements to their homes.[252] Further, he asserts that energy efficiency loans are "closed-end installment loans," which typically have much lower delinquency rates than revolving lines of credit, such as credit cards.[253] Krasja also asserts that the WHEEL

[246] *See id.*
[247] NASEO, *supra* note 4, at 2.
[248] *Id.*
[249] *See* Jones Havard, *supra* note 222, at 489.
[250] *See* Jeffrey Schub, *Nevada Greenbank Study Deliverable 5*, COAL. FOR GREEN CAPITAL 1, 31 (May 2016), http://coalitionforgreencapital.com/wp-content/uploads/2016/06/Nevada-Green-Bank-Study-Potential-Products.pdf [https://perma.cc/Z4XD-J69K].
[251] *See* Clouse, *supra* note 36.
[252] *Id.*
[253] *See id.*

program is able to eliminate buyer's remorse, because the work is only performed by a network of approved contractors who are not paid until "the customer is 100% satisfied."[254] Finally, as consumers' energy-efficient retrofits begin to cut back on energy expenses, the consumers will have more cash available to help repay the loans.[255]

D. WHEEL Meets the Requirements for Exemption

In response to concerns raised by a number of parties, the SEC and Federal Banking Agencies provided an exemption from risk-retention rules under Section 15G(e) for community-focused loans.[256] Although WHEEL loans are different from community-focused loans, the rationale for the exemption clearly applies to WHEEL as well. The agencies may provide such an exemption under 15 U.S.C. § 78o-11(e)(2) when the exemption would:

> (A) help ensure high quality underwriting standards for the securitizers and originators of assets that are securitized or available for securitization; and (B) encourage appropriate risk management practices by the securitizers and originators of assets, improve the access of consumers and businesses to credit on reasonable terms, or otherwise be in the public interest and for the protection of investors.[257]

Accordingly, the SEC and Federal Banking Agencies exempted these loans because they were "originated by government-administered programs . . . ."[258] Further, the Federal Banking Agencies strongly considered the mission behind such community loans, which were to bolster at-risk communities or help build wealth for lower-income families.[259] The Agencies reasoned that 15 U.S.C. § 78o-11(e)(2)(A) was satisfied because the entities were incentivized to uphold strong underwriting standards; their mission of providing affordable loans to low income borrowers was "integral to the lending programs administered by these lenders . . . ."[260] Finally, the Federal Banking Agencies agreed to the

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[254] *Id.*
[255] *Id.*
[256] *See* SEC ET AL., Credit Risk Retention Final Rule (Oct. 2014) at 383.
[257] 15 U.S.C. § 78o-11(e)(2).
[258] SEC ET AL., Credit Risk Retention Final Rule (Oct. 2014) at 383.
[259] *See id.*
[260] *See id.*

exemption because providing affordable loans to low-income communities was in the public interest, satisfying § 78o-11(e)(2)(B).[261]

Although the WHEEL program is a public-private partnership, it is clearly a government-administered program, as the Energy Programs Consortium ("EPC") helped establish WHEEL.[262] The EPC's stated purpose is to "foster coordination and cooperation among government agencies in the areas of energy policy and program development."[263] WHEEL further satisfies the first element of the requirements for an exemption[264] because WHEEL's mission is integral to its lending program. WHEEL's purpose is to "provide low cost, large scale capital for state and local government and utility-sponsored residential energy efficiency loan programs" in order to bolster investment in energy-efficient retrofits and cut back on greenhouse gases.[265] Similar to community-focused exempted loans, the WHEEL program is focused on providing affordable energy efficiency loans[266] and is thus incentivized to uphold strong underwriting standards. Finally, WHEEL easily satisfies the second element for an exemption[267] because encouraging investment in energy-efficient retrofits is clearly in the public interest, due to the huge potential economic and environmental benefits.[268]

E. Sophisticated Institutional Investors Do Not Require Additional Protection

Lastly, although the 5% risk retention requirement seeks to protect investor interests,[269] these sophisticated institutional investors do not need additional protection. Institutional investors include hedge funds, mutual funds, pension funds, endowment funds, and insurance companies.[270] Institutional investors are investment professionals who

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[261] *See id.* at 384.
[262] *See* NASEO, *supra* note 4, at 1.
[263] Bellis, *supra* note 6, at 1.
[264] *See* 15 U.S.C. § 78o-11(e)(2)(A).
[265] NASEO, *supra* note 4, at 1.
[266] *See id.* (offering 10% interest rates for energy improvement projects at five-, seven-, and ten-year terms).
[267] *See* 15 U.S.C. § 78o-11(e)(2)(B).
[268] *See* Devries, *supra* note 129, at 52 (For every $1 million invested into WHEEL, an estimated 625 projects valued at $8,000 each will be started and will save an estimated 750 MWHs of electricity, 40,000 therms of natural gas, 10,000,000 gallons of water, and 700 metric tons of CO_2 annually).
[269] *See* 15 U.S.C. § 78o-11(e)(2)(B).
[270] *Institutional Investor*, INVESTOPEDIA, https://www.investopedia.com/terms/i/institutionalinvestor.asp [https://perma.cc/2DSE-SCBJ].

pool capital and use that capital to invest on behalf of other people.[271] Traditionally, such investors have faced fewer protective regulations because they are assumed to be more knowledgeable, and thus more able to protect themselves.[272] Institutional investors are considered more knowledgeable due to their resources and the "specialized knowledge" required to extensively research a number of possible investment options.[273] Indeed, institutional investors are "the pro athletes of the investing game."[274]

Institutional investors are not to be confused with retail investors, who are individual non-professional investors making small investments for their personal accounts.[275] Retail investors do require additional protection; however, because ABS "are complex and issued in large denominations, most buyers are institutional investors."[276] Retail investors are only exposed to such complex securities through mutual funds, which are run by institutional investors investing on behalf of individuals.[277] Institutional investors are responsible for about 70% of stock trading volume in the United States and controlled 25.3 trillion of all U.S. financial assets by the end of 2009.[278] Accordingly, the Rule does not need to protect these professional investors. Such investors have "deep resources at their disposal," and "engage in sophisticated research and analysis of companies and markets."[279] Thus, institutional investors should be prepared to assess the risk of the investment they are entering, and choose a tranche that corresponds to their risk tolerance.

CONCLUSION

To conclude, the WHEEL program has the potential to create significant economic and environmental benefits.[280] Not only will it bolster

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[271] *Institutional Investors: Get Smart About the "Smart Money"* (2015), FIN. INDUS. REGULATORY AUTH. (FINRA), https://www.finra.org/investors/institutional-investors-get-smart-about-smart-money [https://perma.cc/73DM-UQSM] (last visited Jan. 11, 2019) [hereinafter FINRA].
[272] *See Institutional Investor*, *supra* note 270.
[273] *Id.*
[274] FINRA, *supra* note 271.
[275] *See Retail Investor*, INVESTOPEDIA, https://www.investopedia.com/terms/r/retailinvestor.asp [https://perma.cc/KE83-8PAJ].
[276] *Investing in Mortgage-Backed Securities*, T. ROWE PRICE, https://individual.troweprice.com/staticFiles/Retail/Shared/PDFs/Insights/InvestingInMortgageBackedSecurities.pdf [https://perma.cc/N8CD-4TDA].
[277] *See id.*
[278] FINRA, *supra* note 271.
[279] *Id.*
[280] *See* Devries, *supra* note 129 (For every $1 million invested into WHEEL, an estimated

jobs for contractors who make these energy-efficient improvements, but such improvements will also lead to significant reductions in the use of electricity, water, and fuel.[281] Currently, the WHEEL program has been hampered by uncertainty over the riskiness of the underlying assets,[282] the struggle to originate loans caused by slow political processes which prevent sponsors from quickly joining WHEEL,[283] and the Dodd-Frank Credit Risk Retention Rule. The Rule will ultimately expose sponsors, such as Renew Financial and government programs, to more risk than originally allotted for under the program.[284] Exposing companies such as Renew Financial to extra risk will deter private capital from joining WHEEL, unless interest rates on these loans are increased to compensate the companies for this risk.[285] Increasing interest rates would deter homeowners from taking loans out via WHEEL, and failure to raise rates would scare away private capital, without which there would not be enough funds in WHEEL to purchase loans for aggregation.[286] To prevent the destruction of such a beneficial program, sponsors in the WHEEL program should be exempted from the Rule. The exemption should apply because WHEEL loans are fixed-rate and suffer from fewer delinquencies than revolving lines of credit;[287] they are part of a government-administered program, and are incentivized to uphold strong underwriting standards because their mission of providing affordable energy efficiency loans is integral to the lending program;[288] and the institutional investors the Rule aims to protect are the professionals of the investing world and do not need additional protection.[289]

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625 projects valued at $8,000 each will be started and will save an estimated 750 MWHs of electricity, 40,000 therms of natural gas, 10,000,000 gallons of water, and 700 metric tons of CO2 annually).

[281] *Id.*; *see also* NY GREEN BANK, *supra* note 118, at 3.

[282] *See* SCI, *supra* note 91.

[283] *See* Kim et al., *supra* note 204, at 20.

[284] *See* SEE ACTION, ACCESSING, *supra* note 157, at 21, 33–34.

[285] *See generally id.* at 5 (WHEEL provides credit enhancement via public funds in order to compensate private funds for risk; however, the Rule effectively eliminates the credit enhancement, exposing the private capital to more risk).

[286] *See* discussion *supra* Section IV.B.

[287] *See* Clouse, *supra* note 36.

[288] *See* SEC ET AL., Credit Risk Retention Final Rule (Oct. 2014) at 383.

[289] FINRA, *supra* note 271.