ALLEGHENY TECHNOLOGIES INC
Form 11-K
December 19, 2017

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 11-K

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

ý ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [NO FEE REQUIRED]
FOR THE PERIOD ENDED JUNE 30, 2017

.. TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [NO FEE REQUIRED]
FOR THE TRANSITION PERIOD FROM TO
COMMISSION FILE NUMBER 1-12001
ATI LADISH HOURLY EMPLOYEES
SAVINGS AND DEFERRAL INVESTMENT PLAN
(Title of Plan)
ALLEGHENY TECHNOLOGIES INCORPORATED
(Name of Issuer of securities held pursuant to the Plan)
1000 Six PPG Place, Pittsburgh, Pennsylvania 15222-5479
(Address of Plan and principal executive offices of Issuer)

AUDITED FINANCIAL STATEMENTS
ATI Ladish Hourly Employees Savings and Deferral Investment Plan
As of June 30, 2017 and December 31, 2016 and for the Period Ended June 30, 2017
With Report of Independent Registered Public Accounting Firm

ATI LADISH HOURLY EMPLOYEES SAVINGS AND DEFERRAL INVESTMENT PLAN
Audited Financial Statements
As of June 30, 2017 and December 31, 2016 and for the Period Ended June 30, 2017

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Report of Independent Registered Public Accounting Firm
Allegheny Technologies Incorporated
Pittsburgh, Pennsylvania

We have audited the accompanying statements of net assets available for benefits of the ATI Ladish Hourly Employees Savings and Deferral Investment Plan (the Plan) as of June 30, 2017 and December 31, 2016, and the related statement of changes in net assets available for benefits for the period ended June 30, 2017. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of June 30, 2017 and December 31, 2016, and the changes in its net assets available for benefits for the period ended June 30, 2017, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 1 to the financial statements, the Plan was terminated effective June 30, 2017 as a result of the transfer of all participants into a separate plan sponsored by Allegheny Technologies Incorporated, the Plan Sponsor. Our opinion is not modified with respect to this matter.

/s/ Schneider Downs & Co., Inc.
Pittsburgh, Pennsylvania
December 19, 2017

ATI LADISH HOURLY EMPLOYEES
SAVINGS AND DEFERRAL INVESTMENT PLAN
Statements of Net Assets Available for Benefits

	June 30 2017	December 31 2016
Investments at fair value:		
Interest in Allegheny Technologies Incorporated Master Trust	$ —	$ 20,642,759
Total investments at fair value	—	20,642,759
Investments at contract value:		
Interest in Allegheny Technologies Incorporated Master Trust	—	3,665,509
Total investments at contract value	—	3,665,509
Employee contributions receivable	—	25,120
Employer contributions receivable	—	4,186
	—	29,306
Net assets available for benefits	$ —	$ 24,337,574

See accompanying notes.

ATI LADISH HOURLY EMPLOYEES
SAVINGS AND DEFERRAL INVESTMENT PLAN
Statement of Changes in Net Assets Available for Benefits

	Period Ended June 30, 2017
Additions to net assets attributed to:	
Contributions:	
Employee	$ 789,629
Employer	100,840
Rollovers	30,548
Total contributions	921,017
Investment income:	
Net investment income from Plan interest in Allegheny Technologies Incorporated Master Trust	2,047,797
Total additions	2,968,814
Deductions from net assets attributed to:	
Benefits paid to participants	(3,074,233)
Administrative expenses	(400)
Total deductions	(3,074,633)
Net decrease in net assets available for benefits prior to transfers	(105,819)
Transfers out of plan	(24,231,755)
Net decrease in net assets available for benefits	(24,337,574)
Net assets available for benefits at beginning of year	24,337,574
Net assets available for benefits at end of year	$ —

See accompanying notes.

ATI LADISH HOURLY EMPLOYEES
SAVINGS AND DEFERRAL INVESTMENT PLAN
Notes to Financial Statements
June 30, 2017

1. Description of the Plan
The following description of the ATI Ladish Hourly Employees Savings and Deferral Investment Plan (the Plan) provides only general information. The Plan agreement should be referred to for a more complete description of the Plan's provisions. This Plan was terminated effective June 30, 2017 as a result of the transfer of all participants and corresponding accounts into the ATI Retirement Plan, a separate plan sponsored by ATI.
General: The Plan was a defined contribution plan that included all Cudahy Forgings Division (CFD) hourly employees of ATI Ladish LLC (the Company), who were covered by a collective bargaining agreement that permitted participation in the Plan. The Plan was subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA), as amended.
Plan administration: The Plan Sponsor was Allegheny Technologies Incorporated (ATI, the Plan Sponsor). Mercer Trust Company was the trustee for the Plan and was responsible for administering, investing and the safekeeping of all the Plan's assets.
Participant accounts: Separate accounts were maintained for each participating employee. Trustee fees and asset management fees charged by the Plan's trustee, Mercer Trust Company, for the administration of all funds were charged against net assets available for benefits of the respective fund. Certain other expenses of administering the Plan were paid by the Plan Sponsor.
Participant contributions: Amounts up to 50% of a participant's compensation, as defined in the Plan agreement, could be contributed in any combination of after-tax and before-tax contributions. Before-tax contributions resulted in a reduction of the participant's income for purposes of Federal and state income taxes, while after-tax contributions did not result in any reduction. The Plan permitted after-tax Roth 401(k) deferrals. Participant contributions were limited to $18,000 in 2017. Catch up contributions of $6,000 were available to participants 50 years or older. Participants were allowed to rollover existing qualified retirement funds into the Plan. The Plan allowed employees to contribute a portion of eligible wages each pay period through payroll deductions subject to Internal Revenue Code limitations.
Company contributions: The Company only made contributions to all bargaining unit employees included in the International Federation of Professional and Technical Engineers #92 (IFPTE), as a result of contract negotiations. The Company had agreed to make contributions into the participants' accounts for all hours worked, including holiday and vacation hours, up to a maximum of forty hours per week. The Company contribution was $1.20 per hour. In addition, all IFPTE employees hired on or after August 20, 2012 received an additional $0.55 per hour.
Vesting: The balance in a participant's account related to employer contributions and associated earnings became 20% vested for each year of credited service and was fully vested after five years of Company service. In the event of termination prior to 100% vesting, the non-vested portion was forfeited. Participant contributions and associated earnings were fully vested at all times. Participant accounts were 100% vested upon disability or death.
Forfeitures: Forfeitures were used to reduce future Company contributions.
Investment options: Unless otherwise specified by the participant, contributions were made to the QDIA (Qualified Default Investment Alternative), The Vanguard Target Retirement Fund that most closely matched the participants 65th birthday date (e.g. Vanguard Target Retirement 2030 Fund). The Plan allowed participants to direct their contributions, and contributions made on their behalf to any of the Plan's investment alternatives. Effective in January 2017, participants were restricted to a 10% contribution and investment limit in the ATI Stock Fund.
Payment of benefits: Participants, while employed, could withdraw all or a portion of their after-tax contributions and could also withdraw all or a portion of their before-tax contributions in the event of demonstrated financial hardship, as defined by the Plan. In-service distributions were only permitted if the participant was 100% vested in the amounts being withdrawn and a participant could take no more than two in-service distributions in a Plan year and the distribution amount could not be less than $1,000. After attainment of age 59½, a participant was not limited to the number of in-service distributions taken within the Plan year or the amount of such distributions.

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Payments of benefits was available by request upon termination due to retirement, disability, death, or other voluntary or involuntary termination of employment. Distributions of account balances were made as lump-sum or installment payments.

Participant loans were not permitted under the Plan.

2. Significant Accounting Policies

Use of Estimates and Basis of Accounting

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements, accompanying notes and supplemental schedules. Actual results could differ from those estimates. The financial statements are prepared under the accrual basis of accounting.

Investment Valuation

Certain assets of the Plan were commingled in the Allegheny Technologies Incorporated Master Trust (the Master Trust) with the assets of various ATI sponsored defined contribution plans for investment and administrative purposes. The investment in the Master Trust represented the Plan's interest in the net assets of the Master Trust, and was stated at fair value or for fully benefit-responsive investment contracts, at contract value. Contract value is the relevant measurement attributable to fully benefit-responsive investment contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan. The contract value represents contributions plus earnings, less participant withdrawals and administrative expenses.

Master Trust assets as well as income/losses were allocated among the participating plans by assigning to each plan those transactions (primarily contributions, benefit payments, and plan-specific expenses) that can be specifically identified and by allocating among all plans, in proportion to the fair value of the assets assigned to each plan, income and expenses resulting from the collective investment of the assets of the Master Trust.

Payment of Benefits

Benefits were recorded when paid.

3. Investments

The Plan was terminated and was no longer part of the Master Trust effective June 30, 2017. In 2016, the assets of the Plan along with the assets of various other ATI sponsored plans were part of the Master Trust. The Plan also permitted self-directed investments in registered investment companies that were maintained in accounts separate from the Master Trust.

The following table is a summary, at fair value, of the net assets of the Master Trust by investment type as of December 31, 2016:

	2016	
	Master Trust Balances	Plan's Interest in Master Trust Balances
Common collective trusts	$489,368,944	$9,648,433
Registered investment companies	216,426,850	10,796,755
Corporate common stock	72,658,442	179,422
Other	713,945	18,149
Total investments held at fair value	$779,168,181	$20,642,759

The following table is a summary, at contract value, of the net assets of the Master Trust by investment type as of December 31, 2016:

	2016	
	Master Trust Balances	Plan's Interest in Master Trust

		Balances
Synthetic investment contracts	$150,219,352	$3,108,312
Guaranteed investment contracts	26,928,391	557,197
Total investments at contract value	$177,147,743	$3,665,509

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Investment income attributable to the Master Trust for the period ended June 30, 2017 was as follows:

Net appreciation in fair value of investments	$67,303,200
Income from investments at contract value	1,660,510
Expenses	
Administrative expenses and other, net	(516,267)
Total investment income	$68,447,443

The BNY Mellon Stable Value Fund (the Fund) investment alternative invests in a pooled insurance company separate account guaranteed investment contract, actively managed structured or synthetic investment contracts (SICs), and a common collective trust. SICs consist of a wrapper contract that covers specific assets supporting the SICs. These assets are owned by the Plan. A bank or insurance company issues the wrapper contract that allows participant-directed transactions to be made at contract value. The assets supporting the SICs are generally comprised of US Treasury bonds, agency bonds, corporate bonds, residential mortgage backed securities, asset-backed securities, commercial mortgage-backed securities, and common collective trusts.

Interest crediting rates on the contracts held in the Fund are determined at the time of purchase. Such crediting rates are reviewed and may be reset on a quarterly basis. Typically, the investment contracts do not have a stated final maturity. Commonly referred to as "constant duration" contracts, the underlying assets are either managed against a stated benchmark or to a targeted duration.

Certain investment contracts may provide for adjustments to contract value for withdrawals made prior to termination. If the Plan were deemed to be in violation of ERISA or lose its tax exempt status, among other events, the issuers of the fully benefit responsive investment contracts would have the ability to terminate the contracts and settle at an amount different from contract value.

Certain investments are subject to restrictions or limitations if the Plan Sponsor decided to entirely exit an investment. Investments in registered investment companies and the Fund may require at least 30 days prior notice to completely withdraw from the investments. The targeted date fund investments held in common collective trusts currently do not require the prior approval of the investment manager if the Plan Sponsor decides to entirely exit these investments, but prior trade date notification is necessary to effect timely securities settlement or delivery of an investment's liquidation and transfer to another investment. The Plan had no unfunded commitments as of June 30, 2017 or December 31, 2016.

4. Fair Value Measurement

In accordance with accounting standards, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The accounting standards establish a three-level hierarchy for fair value measurements based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date.

Determination of Fair Value

Fair value is based upon quoted market prices, where available. If listed prices or quotes are not available, fair value is based upon models that primarily use, as inputs, market-based or independently sourced market parameters, including yield curves, interest rates, volatilities, equity or debt prices, foreign exchange rates and credit curves. In addition to market information, models may also incorporate transaction details, such as maturity. Valuation adjustments, such as liquidity valuation adjustments, may be necessary when the Plan is unable to observe a recent market price for a financial instrument that trades in inactive (or less active) markets. Liquidity adjustments are not taken for positions classified within Level 1 (as defined below) of the fair value hierarchy.

The methods described below may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

Valuation Hierarchy

The three levels of inputs to measure fair value are as follows:

Level 1 – Quoted prices in active markets for identical assets and liabilities.

Level 2 – Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

Valuation Methodologies

The valuation methodologies used for assets and liabilities measured at fair value, including their general classification based on the fair value hierarchy, include the following:

- Cash and cash equivalents – Where the net asset value (NAV) is a quoted price in a market that is active, it is classified within Level 1 of the valuation hierarchy.
- Corporate common stocks – These investments are valued at the closing price reported on the major market on which the individual securities are traded. Common stock is classified within Level 1 of the valuation hierarchy.
- Common collective trust funds – These investments are investment vehicles valued using the NAV, as a practical expedient, provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding.
- Registered investment companies – These investments are public investment vehicles valued using the NAV provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. Where the NAV is a quoted price in a market that is active, it is classified within Level 1 of the valuation hierarchy.

The following table presents the financial instruments of the Master Trust at fair value by caption on the statements of net assets available for benefits and by category of the valuation hierarchy (as described above) as of December 31, 2016. The Master Trust had no assets classified within Level 2 or Level 3 of the valuation hierarchy. There were no reclassifications of assets between levels of the fair value hierarchy for the period presented.

Master Trust assets measured at fair value on a recurring basis:

December 31, 2016	Level 1	NAV (a)	Total
Common collective trusts	$—	$489,368,944	$489,368,944
Registered investment companies	216,426,850	—	216,426,850
Corporate common stock	72,658,442	—	72,658,442
Other	713,945	—	713,945
	$289,799,237	$489,368,944	$779,168,181

(a) Certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in Note 3 and to the statement of assets available for benefits.

5. Income Tax Status
The Plan obtained its latest determination letter dated January 25, 2016, in which the Internal Revenue Service stated the Plan, as then designed, was in compliance with the applicable requirements of the Internal Revenue Code. Therefore, no provision for income taxes has been included in the Plan’s financial statements.
The Plan administrator has analyzed the tax positions taken by the Plan, and has concluded that as of June 30, 2017 and December 31, 2016, there are no uncertain positions taken or expected to be taken. The earliest tax year open to U.S. Federal examination is 2014.
6. Party-In-Interest Transactions
At December 31, 2016, the Plan held 9,407 shares of common stock of ATI, the sponsoring employer, with a fair value of $179,422. The shares held by the Plan at December 31, 2016 reflect the Plan’s interest in the Master Trust. During the period ended June 30, 2017 the Plan recorded an investment gain of $11,067 related to its investment in the common stock of ATI.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the administrators of the Plan have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

ALLEGHENY TECHNOLOGIES INCORPORATED

ATI LADISH HOURLY EMPLOYEES
SAVINGS AND DEFERRAL INVESTMENT PLAN

Date:	December 19, 2017	By:	/s/ Karl D. Schwartz
			Karl D. Schwartz
			Vice President, Controller and Chief Accounting Officer
			(Principal Accounting Officer and Duly Authorized Officer)

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