

Third Quarter 2016 Financial Results Presentation

NASDAQ: GNBC October 28, 2016

Today's Speakers



- Manny Mehos Chairman and Chief Executive Officer
- Geoff Greenwade President and Bank Chief Executive Officer
- Donald Perschbacher Executive Vice President & Corporate Chief Credit
 Officer
- John Durie Executive Vice President and Chief Financial Officer

Safe Harbor



The following information contains, or may be deemed to contain, "forward-looking statements" (as defined in the U.S. Private Securities Litigation Reform Act of 1995) giving Green Bancorp, Inc.'s ("Green Bancorp") expectations or predictions of future financial or business performance or conditions. Most forward-looking statements contain words that identify them as forward-looking, such as "plan", "seek", "expect", "intend", "estimate", "anticipate", "believe", "project", "opportunity", "target", "goal", "growing", "continue", "positions," "prospects" or "potential," by future conditional verbs such as "will," "would," "should," "could" or "may", or by variations of such words or by similar expressions that relate to future events, as opposed to past or current events. By their nature, forward-looking statements are not statements of historical facts and involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. These statements give Green Bancorp's current expectation of future events or its future performance and do not relate directly to historical or current events or Green Bancorp's historical or future performance. As such, Green Bancorp's future results may vary from any expectations or goals expressed in, or implied by, the forward-looking statements included in this presentation, possibly to a material degree.

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In addition to factors previously disclosed in Green Bancorp's reports filed with the SEC and those identified elsewhere in this communication, the following factors among others, could cause actual results to differ materially from forward-looking statements: difficulties and delays in integrating the Green Bancorp and Patriot Bancshares, Inc. businesses or fully realizing cost savings and other benefits; business disruption following the proposed transaction; changes in asset quality and credit risk; the inability to sustain revenue and earnings growth; changes in interest rates and capital markets; inflation; customer borrowing, repayment, investment and deposit practices; customer disintermediation; the introduction, withdrawal, success and timing of business initiatives; competitive conditions; the inability to realize cost savings or revenues or to implement integration plans and other consequences associated with mergers, acquisitions and divestitures; economic conditions; and the impact, extent and timing of technological changes, capital management activities, and other actions of the Federal Reserve Board and legislative and regulatory actions and reforms.

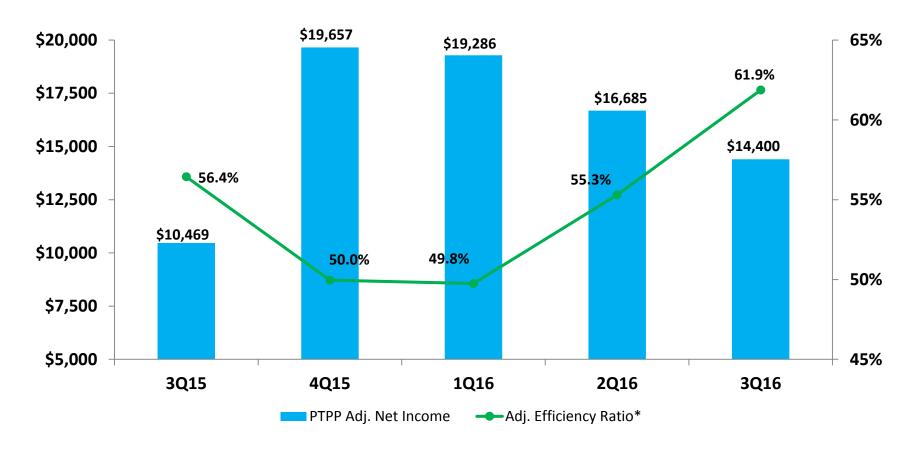
Annualized, pro forma, projected and estimated numbers are used for illustrative purpose only, are not forecasts and may not reflect actual results.



Pre-Tax Pre-Provision Adjusted Net Income



- Core profitability is intact, despite overhang from energy portfolio
- 3Q16 PTPP Adj. NI was impacted by \$3 million in MARS-related expenses



(*) excludes one-time acquisition expenses



Managed Asset Reduction Strategy 'MARS'

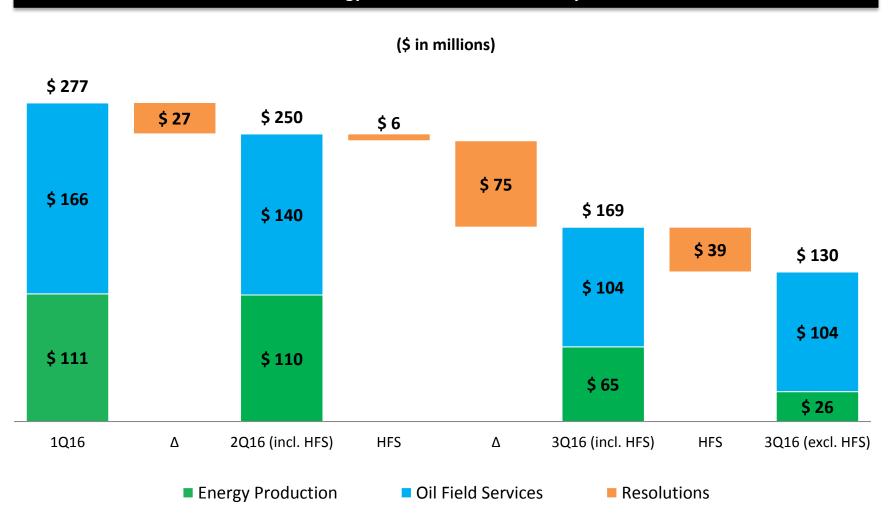


- MARS program was announced on the first quarter 2016 earnings call
- Primary goal of MARS is to resolve, primarily via payoff or sale, the company's energy portfolio
 - Since beginning in April 2016, the program has resolved:
 - \$108.8 million of energy production and oil field service loans
 - \$105.9 million of classified assets and purchased credit impaired loans
 - MARS Energy portfolio consists of \$26 million in energy production loans and \$104 million in oil field services loans, pro-forma for the sale of \$38.9 million of loans held for sale at September 30, 2016
 - Excluding held for sale loan, energy loans represent 4.3% of total loans, down from 7.5% at June 30, 2016
- Currently expect to maintain risk-based capital ratios through the duration of the program

Overview of Energy Portfolio Progress



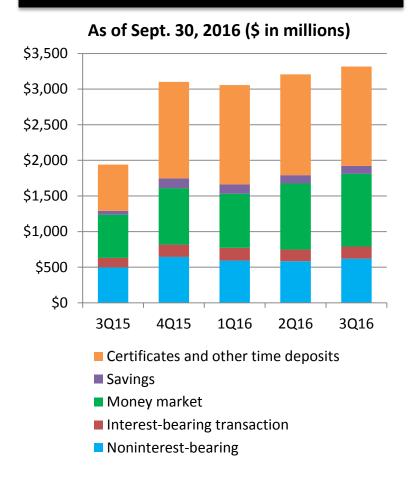
Energy Portfolio Resolution History



Deposit Update



Total Deposit Composition



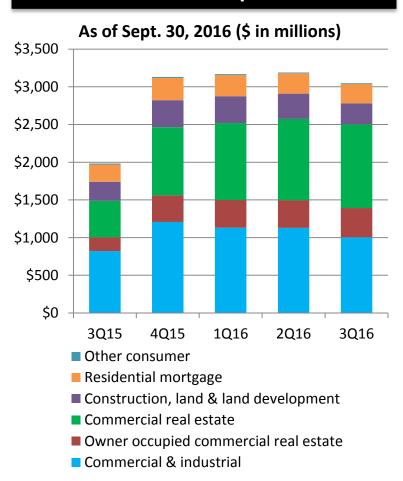
Highlights

- Total deposits increased \$108.6 million during the third quarter to \$3.3 billion
- Noninterest-bearing deposits were 18.6% of deposits at September 30, 2016
- Cost of deposits including noninterestbearing was 0.65%, roughly stable compared to the second quarter

Loan Update



Total Loan Composition



Highlights

- Total loans decreased by \$141.8 million during the third quarter to \$3.0 billion
- Loan yield for the third quarter of 2016 was 4.77%, stable compared to the second quarter
 - Loan yield, excluding fees, for the third quarter was 4.20%, down 9 bps from the second quarter of 2016
 - Fees and discounts at payoff contributed approximately 12 basis points to the third quarter loan yield
 - Accretion of fees and discounts (net) contributed approximately
 45 basis points to the third quarter loan yield

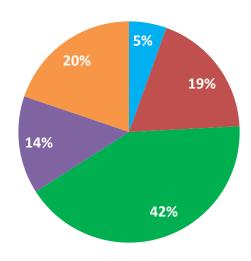
Existing Banker Capacity



Our current staff of bankers has the capacity to support up to \$4 billion of loans and deposits

Banking Staff

As of September 30, 2016



- Private Banker 5
- Business Banker 17
- Commercial Banker 38
- Specialty Banker 13
- Deposit Relationship Manager 18

Regional Distribution

- Private Banker
 - DFW 5
- Business Banker
 - DFW 8
 - HOU 9
- Commercial Banker
 - DFW 14
 - HOU 21
 - OTH 3

- Specialty Banker
 - DFW 6
 - HOU 6
 - OTH 1
- Deposit Relationship Manager
 - DFW 8
 - HOU 10

DFW - Dallas MSA

HOU – Houston MSA

OTH – Other MSAs

Credit Quality



- Nonperforming assets (NPAs) totaled \$130.1 million or 3.31% of period end assets at September 30, 2016 compared to \$93.5 million or 2.44% of period end total assets at June 30, 2016
- Excluding loans held for sale, total nonperforming assets would have been \$105.3 million or
 2.68% of period end total assets at September 30, 2016
- Of the approximately \$88.5 million migration to classified status in the quarter, 62% related to acquired Patriot loans and 22% related to Green Bank energy production loans
- Allowance for loan losses was 1.18% of total loans at September 30, 2016, and the allowance for loan losses plus the acquired loan net discount to total loans adjusted for the acquired loan net discount was 1.62%
- Provision expense of \$28.2 million in the third quarter of 2016 reflects the addition of:
 - \$19.2 million in reserves related to write-downs of energy loans that were transferred to held for sale
 - \$8.8 million in specific reserves added for impaired loans, of which \$6.1 million is related to energy loans

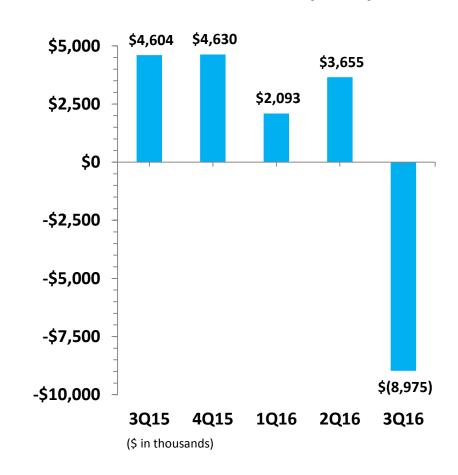
Third Quarter 2016 Financial Results



Net Income (Loss) (1)

	2016 Q3	2016 Q2
Net Income		
(Loss) ⁽¹⁾	\$(8,975)	\$3,655
EPS (1)	\$(0.24)	\$0.10
ROAA (1)	(0.92)%	0.39%
Loans ⁽²⁾	\$3,047,618	\$3,189,436
Deposits	\$3,315,899	\$3,207,261

^{*\$} in thousands, except per share data



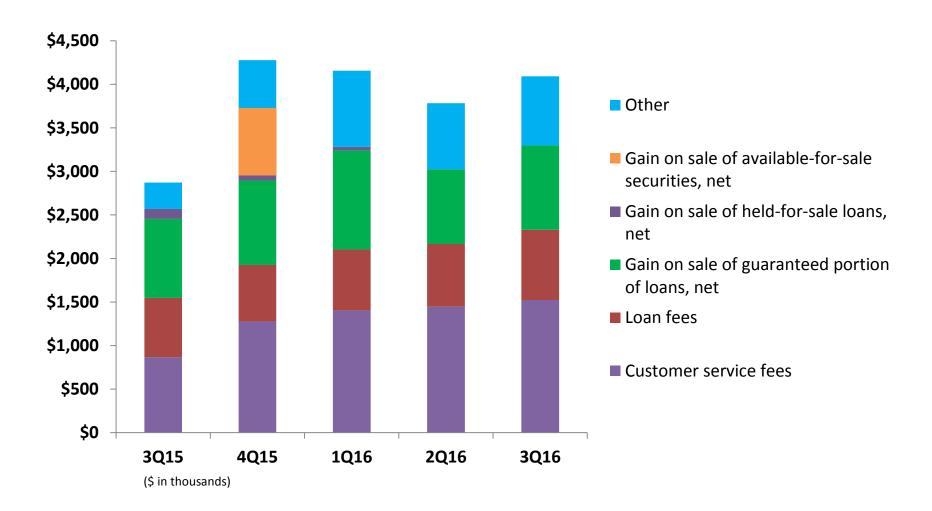
⁽²⁾ Excluding loans held for sale



⁽¹⁾ Excluding one-time acquisition expenses

Noninterest Income

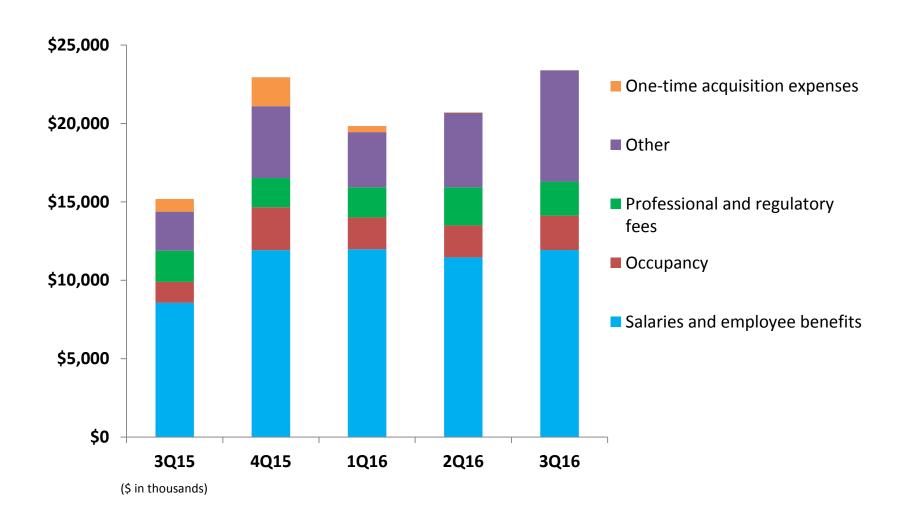






Noninterest Expense

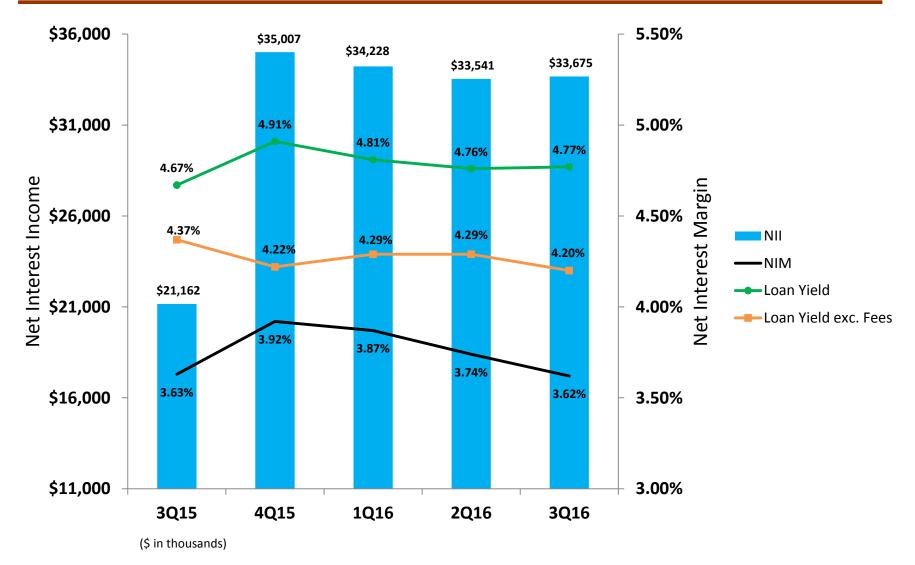






Net Interest Income and Net Interest Margin



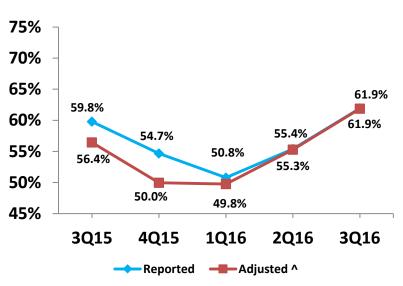




Performance Metrics

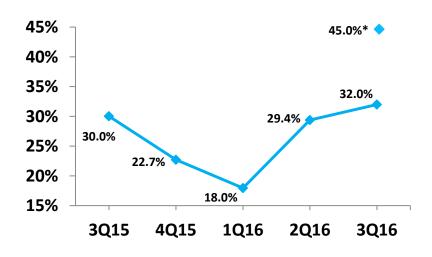


Efficiency Ratio



(^) excludes one-time acquisition expenses

Remaining Banker Capacity



(*) Banker capacity in the Dallas/Fort Worth/Arlington MSA is 45.0%



Question & Answer Session