



2024

SASB and ESG Metrics Report

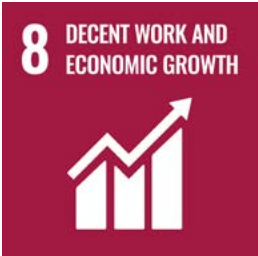
2024 SASB and ESG Metrics Index

This document contains disclosure of key relevant metrics to Essential’s operations, as well as those included in the International Financial Reporting Standards Foundation (IFRS) Sustainability Accounting Standards Board (SASB) standards for the Water Utilities & Services and Gas Utilities & Distribution industries. The document covers disclosures for the period Jan. 1, 2024 through Dec. 31, 2024, unless otherwise noted. For more detailed information about Essential’s sustainability initiatives, strategy, and additional data, see our 2024 Sustainability Report. Essential updates and publishes its full Sustainability Report every other year, providing updates on key metrics between reporting cycles.

Alignment with UN Sustainable Development Goals

At Essential, we are committed to advancing the United Nations Sustainable Development Goals (SDGs), a global blueprint for addressing the world’s most pressing challenges and fostering peace and prosperity for all. We focus our efforts on the SDGs where our business can make the most meaningful and measurable impact. By aligning with these priority goals, we aim to drive positive change across our value chain and within the communities we serve. To learn more about our approach and the actions we’re taking to support our priority SDGs, please visit Sustainability.Essential.co.

ESSENTIAL’S PRIORITY SDGS



Conservation & Stewardship

Essential Utilities

CLIMATE CHANGE



By 2035, the company will achieve a 60% Scope 1 and 2 greenhouse gas emissions reduction, from a 2019 baseline.

- Essential has achieved a 28% reduction from its 2019 baseline
- Since 2022, Essential’s water and wastewater operations have procured nearly 100% renewable electricity for its Pennsylvania, Illinois, Ohio, and New Jersey utilities
- Essential’s gas operations continued main replacement activities to reduce fugitive methane emissions

ESSENTIAL UTILITIES: GHG EMISSIONS¹

(Metric Tons CO₂e)

| | 2024 | 2023 | 2022 | 2019 (Baseline) |
|--|----------------|----------------|----------------|--------------------|
| Scope 1 emissions | 443,483 | 463,065 | 489,132 | 553,530 |
| Scope 2 emissions (market-based) | 39,198 | 41,392 | 51,008 | 117,393 |
| Total Scope 1 and 2 emissions (market-based) | 482,681 | 504,457 | 540,141 | 670,923 |
| Total Scope 3 emissions ² | 8,045,213 | 8,194,886 | 9,020,390 | Not Disclosed |

¹For historical and more detailed disclosure, please refer to the Environment section of our [2025 Sustainability Report](#).

²Scope 3 emissions for our gas operations relate entirely to downstream emissions from customer combustion of the natural gas we deliver. This is the only material source of Scope 3 emissions for our gas operations.

ENERGY MANAGEMENT

(SASB: IF-WU-130a.1)

| | 2024 | 2023 | 2022 |
|---|---------|---------|---------|
| Total energy consumed (MWh) | 785,663 | 780,062 | 761,602 |
| Energy sourced from the grid (percentage grid electricity) | 14.6% | 16% | 15% |
| Energy derived from renewables (percentage renewable) | 29% | 29% | 29% |

ENERGY INTENSITY¹

| | 2024 | 2023 | 2022 |
|---|------|------|------|
| Water (kWh/kgal) | 3.1 | 3.2 | 3.3 |
| Wastewater² (kWh/kgal) | 7.4 | 7.5 | 7.6 |
| Gas (kWh/Mcf) | 2.1 | 2.0 | 1.8 |

¹Energy intensity also includes other energy sources besides electricity. While Essential believes its calculation of energy intensity is the most holistic and informative measurement of resource efficiency, electricity intensity for 2024 is as follows: 2.9 kWh/kgal (water), 7.1 kWh/kgal (wastewater), and 0.1 kWh/Mcf (gas).

²Energy intensity values for wastewater treatment are highly dependent on physical factors, especially relating to interannual rainfall fluctuations. This makes year-on-year trend comparison difficult.

WASTE GENERATION

(Dry metric tons)

| Description | Beneficial Reuse / Recycled | Landfill | Incineration | 2024 Total |
|--|------------------------------|---|--------------|---------------------------|
| Treatment of Water | 50,239 (Land Application) | 1,859 (company owned landfills) 31 (third-party landfills) | N/A | 52,128¹ |
| Treatment of Wastewater | 2,278 (Land Application) | 4,941 | 797 | 8,016 |
| Office Waste / Miscellaneous Non-Hazardous Waste | 353 (Recycled) | 4,927 | N/A | 5,280 |
| Natural Gas Liquids | 431 (Fuel Blending) | N/A | N/A | 431 |
| Hazardous Waste | 3.6 | N/A | 11.6 | 15.2 |

¹We record waste volumes upon removal from our site, consistent with regulatory reporting requirements. We may temporarily store waste on site in significant volumes and ship in a different year than when it was generated. Therefore, year over year, this data will vary.

AIR EMISSIONS¹

(Dry metric tons)

| | 2024 | 2023 | 2022 |
|------------------------------------|-------|-------|-------|
| Nitrogen Oxides ² (NOx) | 176.1 | 203.0 | 211.0 |
| Particulate Matter (PM10) | < 10 | < 10 | < 10 |
| Sulfur Oxides (SOx) | 0.2 | 0.2 | < 1 |
| Volatile Organic Compounds (VOCs) | 52.4 | 44.8 | 45.8 |
| Hazardous Air Pollutants (HAPs) | 22.1 | 21.7 | 23.2 |

¹Emissions data from sources within the scope of our required regulatory air emissions reporting. These include facilities with compressor stations or multiple large emergency generators. The data above does not include air emissions generated from vehicles and permit-exempt emergency generators.

²Nitrous oxide (N₂O) is a greenhouse gas, but we have included it in this section summed with other nitrogen oxides for completeness and because it constitutes a small amount of our total NOx emissions.

Water and Wastewater Business

DISTRIBUTION NETWORK FREQUENCY¹

| | 2024 | 2023 | 2022 |
|---|---|--------------|--------------|
| Water main replacement (miles of main replaced) SASB: IF-WU-140a.1 | There are many factors that can affect year-on-year main replacement. To stabilize these and provide a more consistent view of our replacement rate, we have elected to disclose the average for the past five years. See table below for our rolling averages of recent years. | | |
| Volume of non-revenue water losses (billions of gallons) ² SASB: IF-WU-140a.2 | 18.3 | 17.3 | 17.8 |
| Percent of total production (%) | 21.0% | 20.1% | 20.5% |

¹Data is displayed here in both the absolute value of volume as well as a percentage of total production. This normalizes the data and accounts for changes in total water production, or send out, across years. We believe that, due to our acquisition of new water systems over time, and the practical margin of error with measurement equipment in the field, our levels of non-revenue real water loss have remained materially consistent over the past three years. For more information, refer to the Reducing Water Loss section of our 2024 Sustainability Report.

²Non-revenue water losses represented here include leakage (real losses), apparent losses, (such as theft and meter inaccuracies) and other instances, such as water main flushing and water for emergency fire services. These values are determined based on the difference between water production and water ultimately delivered to customers and billed.

5-Year rolling average of annual miles of water main replacement

145

5-Year rolling average¹ of annual main replacement rate

1.0%

¹There are many factors that can affect year-on-year main replacement. To stabilize these and provide a more consistent view of our replacement rate, we have elected to disclose the average for the past five years.

EFFLUENT QUALITY MANAGEMENT

| | 2024 | 2023 | 2022 |
|---|---|---|---|
| Number of incidents of non-compliance associated with water effluent quality permits, standards and regulations; percent days in compliance SASB: IF-WU-140b.1 | 207 incidents; 96.7% days in compliance | 120 incidents; 98.1% days in compliance | 148 incidents; 97.7% days in compliance |

WATER AFFORDABILITY AND ACCESS¹

| | 2024 | 2023 | 2022 |
|--|--------|--------|--------|
| Number of residential customer water disconnections for non-payment, percentage reconnected within 30 days | 31,174 | 24,325 | 20,577 |
| SASB: IF-WU-240a.3 | 56.0% | 54.3% | 51.9% |

¹We do not believe SASB's other water utility standards on affordability [IF-WU-240a.1 and IF-WU-240a.2] reflect the differences in water rates (as opposed to electric and gas) that exist. Given Essential's wide geographic footprint across 8 states and operation of over 1,500 systems of varying size, the complexity of our operations and the necessary volume in tariffs and rate structures make calculation of materially accurate average and typical rates not representative. We will continue to support efforts to further develop and refine SASB's industry guidance so that it better allows transparency into this issue. We also continue to interface with state public utility commissions to approve rate structures that are both affordable for customers and necessary to adequately maintain infrastructure and promote safety of this critical resource.

DRINKING WATER QUALITY¹

| | 2024 | 2023 | 2022 |
|-------------------------------------|-----------|------------------|-----------|
| Systems with Tier 1 violation | 7 | 7 | 10 |
| Systems with Tier 2 violation | 9 | 6 | 8 |
| Systems with Tier 3 violation | 75 | 142 ² | 39 |
| Total tier violations | 89 | 153 | 61 |
| % of systems with tiered violations | 5.9% | 10.2% | 3.9% |
| % of systems with Tier 1 + Tier 2 | 1.1% | 0.9% | 1.4% |
| % of systems with Tier 3 only | 5.0% | 9.5% | 2.6% |
| Total # of systems | 1,512 | 1,513 | 1,512 |

¹Tiers as defined as per [EPA regulations](#).

²There were several factors that led to the increase in Tier 3 events in 2023. These include regulatory agencies requiring notices for reporting violations that previously did not require Tier 3 notices, as well as some missed monitoring. Essential takes these events seriously and has implemented changes in the company's systems to reduce the potential for future similar missed monitoring.

END-USE EFFICIENCY

| | 2024 | 2023 | 2022 |
|--|-----------------------|-----------------------|----------------------|
| Percentage of water utility revenues from rate structures that are designed to promote conservation and revenue resilience | About 4% ¹ | About 4% ¹ | About % ¹ |
| SASB: IF-WU-420a.1 | | | |

Customer water savings from efficiency measures, by market

SASB: IF-WU-420a.2

Across our footprint, our tariffs are designed so that a larger percentage of the total bill is recovered through a volumetric charge, thereby incentivizing customers to conserve both water and wastewater use on a monthly basis. In addition, our customers' average consumption has fallen significantly over time, largely driven by more efficient appliances. We also have efforts in place to educate customers on this issue and raise awareness of water-saving practices. It is difficult to ascertain the volumetric water savings directly attributable to Essential's efforts because this depends on many variables and factors, but we will continue to educate customers and encourage them to use water efficiently as we all share the responsibility of caring for natural resources.

For additional information, see the Helping Our Customers Conserve Water section of the 2024 Sustainability Report.

¹In Illinois, a volume balancing adjustment (VBA) was introduced and covers the volumetric revenues of our water and wastewater operations, which comprises roughly half of the state utility's total revenues. As Aqua Illinois, in 2024, comprised about 8% of the revenue of Essential's regulated water segment, roughly half of this comes from the VBA rate structure. The VBA tracks actual volumetric revenue and compares against what is allowed in the regulatory rate case. The difference becomes the "rider" or financial adjustment. Essential began tracking this in April of 2018 and the first rider was calculated 12 months later. It did not result in a financially material adjustment.

WATER SUPPLY RESILIENCE

2024

Total water sourced from regions with high or extremely high baseline water stress, percentage purchased from a third party

SASB: IF-WU-440a.1

Essential calculates this figure, across its entire footprint, every two years and notes an expectation that there are no material differences year-on-year. In 2024, reflecting the most recent analysis, 10% of water was sourced from High or Extremely High Baseline Water Stress regions.

This analysis is considered a broad high-level regional analysis and may not represent the true level of stress on a source locally, nor does it take into account the management of sources by groundwater conservation districts, river basin commissions, or other local, state, and federal agencies. Sites that are more prone to water scarcity are monitored and addressed on an individual basis. For more information on how we conducted this analysis and what comprises this figure, see the Promoting Sustainable Water Sourcing section of the 2024 Sustainability Report.

Volume of recycled water delivered to customers

SASB: IF-WU-440a.2

In 2024, we recycled to the groundwater recharge via spray irrigation, drip irrigation, and subsurface infiltration approximately 722.1 million gallons of treated wastewater. This is 6% of the total wastewater treated in 2024, with the remainder safely discharged to streams, rivers, or lakes. Essential will continue to evaluate and examine potential opportunities and technologies to recycle water and reuse wastewater.

NETWORK RESILIENCY & IMPACTS OF CLIMATE CHANGE

| | 2024 | 2023 | 2022 |
|--|--|--------------------------------|--------------------------------|
| <p>Wastewater treatment capacity located in 100-year flood zones</p> <p>SASB: IF-WU-450a.1</p> | <p>Essential calculates this figure, across its entire footprint, every two years and notes an expectation that there are no material differences year-on-year. In 2024, reflecting the most recent analysis, 38% of wastewater treatment capacity was located in 100-year flood zones.</p> <p>This analysis is considered a broad high-level analysis and may not represent the true level of risk for a facility. Sites more prone to flood risk are monitored and addressed individually. For more information on how we conducted this analysis and what comprises this figure, see the Flood Resiliency portion of the Minimizing Untreated Wastewater Discharge section of the 2024 Sustainability Report.</p> | | |
| <p>1) Number and (2) volume of sanitary sewer overflows (SSO)¹ (gallons), (3) percentage of volume recovered</p> <p>SASB: IF-WU-450a.2</p> | <p>See Wastewater-Related Discharge Event table on page 10.</p> | | |
| <p>1) Number of unplanned service disruptions, and (2) customers affected, each by duration category (normalized by 100 miles)²</p> <p>SASB: IF-WU-450a.3</p> | <p>2,546</p> <hr/> <p>23.2</p> | <p>3,018</p> <hr/> <p>20.9</p> | <p>2,634</p> <hr/> <p>18.4</p> |

¹Precipitation events are associated with almost all the SSO volume. At Essential, we capture and treat >99.99% of the wastewater from our customers despite challenges arising from heavy storms, hurricanes, clogs, and blocks.

²These year-on-year changes are likely primarily driven by better data collection and data quality that we have been working toward in recent years, across each of our states. The company is focusing efforts on more comprehensive disruption tracking and training, which may increase our tracking numbers in the near term while affording us the opportunity in the long term to focus our attention on remediation measures that reduce this impact on our customers.

WASTEWATER-RELATED DISCHARGE EVENT DATA

| | 2024 | 2023 | 2022 |
|--|--------------|--------------|--------------|
| # Wastewater-related discharge events | 269 | 250 | 149 |
| # SSO events | 227 | 199 | 86 |
| Miles of system | 3,345 | 2,556 | 2,678 |
| # SSO events/100 miles of system | 6.8 | 7.8 | 3.2 |
| Total volume of wastewater treated (gallons) | 12.0 billion | 11.4 billion | 11.2 billion |
| Wastewater-related event volume (gallons) | 6.3 million | 2.4 million | 9.2 million |
| SSO volume (gallons) | 2.7 million | 1.9 million | 2.0 million |
| % Wastewater volume that is fully treated | 99.98% | 99.98% | 99.92% |
| % Volume of wastewater-related discharge events related to precipitation | 90.2% | 30.8% | 68.2% |
| % of discharge event volume classified as unanticipated plant bypass | 49.8% | 6.4% | 77.3% |
| % plant spill | 6.6% | 16.4% | 0.5% |
| % of discharge volume classified as plant spill | 43.6% | 77.1% | 22.2% |

Gas Distribution Business

GAS AFFORDABILITY AND ACCESS¹

| | 2024 | 2023 | 2022 |
|---|---------|---------|----------|
| Average retail gas rate per MMBtu for (1) residential, (2) commercial, (3) industrial customers, and (4) transportation services only | \$9.49 | \$8.49 | \$14.49 |
| SASB: IF-GU-240a.1 | \$7.56 | \$7.16 | \$12.16 |
| | \$7.06 | \$6.89 | \$11.96 |
| | \$1.67 | \$1.62 | \$1.87 |
| Typical monthly gas bill for (1) 50 MMBtu and (2) 100 MMBtu of gas delivered per year | \$55.21 | \$50.01 | \$72.32 |
| SASB: IF-GU-240a | \$94.76 | \$85.78 | \$131.17 |
| Number of residential customer gas disconnections for non-payment, percentage reconnected within 30 days | 25,329 | 27,238 | 18,827 |
| SASB: IF-GU-240a.3 | 59.4% | 54.3% | 57.4% |

¹Gas rate data disclosed pertains only to Peoples Natural Gas Division of Peoples Natural Gas Company LLC and excludes Peoples Gas Division of Peoples Natural Gas Company LLC, as well as the legal entities of Delta Natural Gas and, for historical years, the recently divested Peoples Gas West Virginia. Peoples Natural Gas Division represents a significant majority of all gas customers and is deemed materially representative for disclosure purposes.

END-USE EFFICIENCY

| | 2024 | 2023 | 2022 |
|--|------|------|------|
| Percentage of gas utility revenues from rate structures that (1) are decoupled or (2) contain a lost revenue adjustment mechanism (LRAM) | 28% | 29% | 28% |
| SASB: IF-GU-420a.1 | 0.0% | 0.0% | 0.0% |

Customer gas savings from efficiency measures by market

SASB: IF-GU-420a.2

Across our state operations, rate structures are designed to promote efficiency through a fixed cost customer charge and a volumetric charge which varies every month based on usage. While there is not a formal customer efficiency and conservation program and this precludes a calculation of gas savings by market, Essential proactively educates our customers on the importance of energy efficiency. For more information, see the Helping Our Customers Conserve Gas section of the 2024 Sustainability Report.

INTEGRITY OF GAS DELIVERY INFRASTRUCTURE

| | 2024 | 2023 | 2022 |
|---|-------|-------|-------|
| Number of (1) reportable pipeline incidents, (2) Corrective Action Orders (CAO), and (3) Notices of Probable Violation (NOPV) | 1 | 1 | 3 |
| SASB: IF-GU-540a.1 | 0 | 0 | 0 |
| Percentage of distribution pipeline that is (1) cast and/or wrought iron and (2) unprotected steel | 0.36% | 0.40% | 0.45% |
| SASB: IF-GU-540a.2 | 14.2% | 15.4% | 17.8% |
| Percentage of gas (1) transmission and (2) distribution pipelines inspected | 100% | 100% | 100% |
| SASB: IF-GU-540a.3 | 40.0% | 43.1% | 42.9% |

Employees

Measuring Safety

No program is complete without effective ways to measure safety performance and make improvements based on these metrics. To accomplish this, Essential monitors safety through a variety of mechanisms. Over the past three years, there have been no fatalities or OSHA citations. Please note that all reported safety data only pertains to full-time Essential employees.

| LOST TIME AND RESTRICTED TIME INJURIES (LT/RT) ¹ | | | | | |
|---|----------------------|------|------|------|-----------------------------|
| | | 2024 | 2023 | 2022 | Industry Group Average 2024 |
| Rate | Essential | 1.1 | 1.2 | 1.2 | N/A |
| | Water and Wastewater | 1.6 | 1.6 | 1.5 | 3.1 ² |
| | Gas | 0.9 | 0.9 | 1.0 | 1.4 ² |
| Count | Essential | 36 | 38 | 39 | N/A |
| | Water and Wastewater | 23 | 24 | 24 | N/A |
| | Gas | 13 | 14 | 15 | N/A |

¹Employee injuries resulting in days away from work, job restriction, or transfer. Rate = 200,000 / Hours Worked. Same as DART rate.

²According to the Bureau of Labor Statistics.

| EMPLOYEE-RESPONSIBLE MOTOR VEHICLE ACCIDENTS (RVAS) ¹ | | | | |
|--|----------------------|------|------|------|
| | | 2024 | 2023 | 2022 |
| Rate | Essential | 2.5 | 2.4 | 2.2 |
| | Water and Wastewater | 2.6 | 2.7 | 2.5 |
| | Gas | 2.3 | 2.1 | 1.8 |
| Count | Essential | 79 | 78 | 68 |
| | Water and Wastewater | 45 | 47 | 42 |
| | Gas | 34 | 31 | 26 |

¹Rate = # RVAs/miles driven*1,000,000

FATALITIES

2024
0

2023
0

2022
0

OSHA CITATIONS

2024
0

2023
0

2022
0

NEAR MISSES REPORTED IN 2024

Essential
505

Aqua
467

Peoples
38

TURNOVER RATES

| | Retirements | Voluntary Turnover (Excluding Retirements) | Involuntary Turnover |
|--------------------------------|-------------|---|-------------------------|
| Executive/Sr. Manager Turnover | 0.0% | 0.1% | 0.0% |
| Mid-level Manager | 0.6% | 0.7% | 0.3% |
| Professional | 0.1% | 0.9% | 0.3% |
| All Others | 1.4% | 5.2% | 2.4% |
| Total | 2.1% | 6.7% | 2.9% |

EMPLOYEE DEMOGRAPHICS REPORTING

EEO-1 Summary Table

Essential has published its full, unmodified EEO-1 Summary Table for 2024 [here](#), as well as for 2023 [here](#).

Governance

Polices

Essential's corporate governance policies are available on Essential's website for download. These policies comprise a critical complement to this Sustainability Report and our data disclosures. As board-approved documents, they represent the most formal articulation of Essential's sustainability commitments to our stakeholders. The performance and achievements noted in our Sustainability Report are consistent with the directives and bedrock principles the board has explicitly outlined for the organization in these approved policies.

[Code of Ethical Business Conduct](#)

[Human Rights Policy](#)

[Human Right to Water Policy](#)

[Labor Rights Policy](#)

[Political Spending Policy](#)

[Equal Employment Opportunity & Anti-Harassment](#)

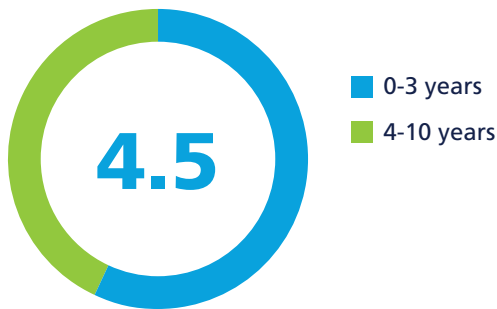
[Conflict of Interest Policy](#)

[Sustainability and Environmental Policy](#)

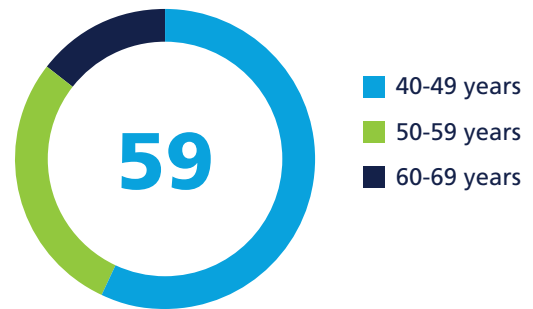
[Supplier Code of Conduct](#)

Board Composition

AVERAGE TENURE OF INDEPENDENT DIRECTORS



AVERAGE AGE OF INDEPENDENT DIRECTORS



"C-Suite" Leadership Experience



Mergers & Acquisitions Experience



Regulatory Experience



Utility Industry Experience



Corporate Governance Highlights

We are committed to maintaining strong standards of corporate governance, which promote the long-term interests of our shareholders, strengthen Board and management accountability, and help build public trust in our Company.

Board Accountability

- Annual election of directors
 - 15-year term limit for directors who were elected after 2015
 - Peer review of director performance
-

Board Independence

- Seven out of eight directors were independent
 - Independent audit, compensation, and governance committees
-

Lead Independent Director

- Lead Independent Director with clearly defined and robust responsibilities
-

Board and Committee Evaluations

- Peer evaluations of the directors, the Board, and its committees
-

Board Refreshment

- All of the independent directors joined the Board since 2015
 - Mandatory retirement age of 75 for directors. This Retirement Policy was enforced in 2024.
-

Risk Oversight

- Risk oversight by full Board and all committees
 - Robust oversight of cybersecurity measures by full Board and Risk Mitigation & Investment Policy Committee
 - Board evaluation of Artificial Intelligence, including Audit Committee review of external auditor utilizing AI.
-

Stock Ownership Guidelines

- Robust director and management stock ownership guidelines
 - All shareholdings disclosed and measured are actual shares owned and do not include RSUs, PSUs, and Stock Options.
 - Directors: 5x annual base cash retainer
 - CEO: 5x midpoint of average base salary
 - Other NEOs/EVPs: 3x midpoint of average base salary
-

Shareholder Engagement

- Comprehensive shareholder outreach conducted in 2024, including over 400 meetings held with investors



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