

# 2018-20 Strategic Plan

## Department of Energy [409]

### Mission

It is the mission of the Department of Mines, Minerals and Energy (DMME) to enhance the development and conservation of energy and mineral resources in a safe and environmentally sound manner to support a more productive economy.

### Vision

We envision DMME as a nationally recognized energy, geology, and mineral extraction customer service agency that showcases worker and public safety, and environmental protection. Further, we see ourselves as a model agency known for the leadership of our people -- one that uses strategic planning and management to provide the high quality, innovative, one-stop service and information that adds value in the eyes of our customers and the public; is trusted to exhibit high standards of competency and fairness in all aspects of our work and relationships; and empowers, develops, and treats our employees with fairness and respect creating the workplace of choice in our communities.

### Values

#### In Dealing With Our Customers, We Value:

- Operating with a high sense of ethics, honesty, and integrity.
- Demonstrating fairness, respect, responsiveness, straightforwardness, and deliberateness in our actions and communications.
- Functioning in a competent and knowledgeable manner, which emphasizes such principles as: consistency in service provision; attentiveness to customer's needs and their organizational and operational requirements; and being firm, yet flexible, in delivering services which focus on safety, energy, the environment, and economic development.
- Operating in a seamless manner to deliver quality customer services.

#### In Dealing With Each Other, We Value:

- Recognizing each other's outstanding accomplishments.
- Setting priorities to ensure that critical/essential services are delivered with quality by staff that are properly supported and equipped with adequate resources.
- Meeting the requirements of the law and externally driven policies, but always being innovative where flexibility exists.
- Innovation and creativity, acknowledging that mistakes will be made from which we can learn.
- Trust and mutual respect.
- Doing the right things, ethically and honestly.
- Developing and training ourselves.
- Going beyond normal duties to help others and to seek and provide accurate and helpful advice.
- Openly communicating agency plans and decisions and, therefore, recognizing each other's need for information and understanding.
- Assuming accountability for work quality, while at the same time, accepting responsibility for working seamlessly.
- Dealing with tough situations by keeping a sense of humor and being "good sports".
- Our safety and well-being.

### Finance

#### Financial Overview

For FY 2019, DMME's funding derives from federal funds (41%), general fund appropriation (37%), permit and license fees paid by mineral extraction operators (9%), bond forfeiture proceeds (6%), indirect cost recovery revenue (4%), and miscellaneous sources such as state designated mine rescue team dues, civil penalty payments, and orphaned mineral mine or well reclamation or plugging revenues (3%).

For FY 2020, DMME's funding derives from federal funds (42%), general fund appropriation (36%), permit and license fees paid by mineral extraction operators (9%), bond forfeiture proceeds (6%), indirect cost recovery revenue (4%), and miscellaneous sources such as state designated mine rescue team dues, civil penalty payments, and orphaned mineral mine or well reclamation or plugging revenues (3%).

#### Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	13,495,297	23,584,787	13,495,297	23,584,787
Changes to Initial Appropriation	0	0	0	0

*(Changes to Initial Appropriation will be 0 when the plan is created. They will change when the plan is updated mid-biennium.)*

## Customers

### Anticipated Changes to Customer Base

Market forces will largely drive growth or decline in DMME's regulated industries. Actions at the federal level with respect to regulations or budget cuts may also affect these industries.

### Current Customer List

Predefined Group	User Defined Group	Number Served Annually	Potential Number of Annual Customers	Projected Customer Trend
Employee	Coal mine workers	2,277	0	Decrease
Employer/ Business Owner	Permitted coal mine sites	240	0	Decrease
Employer/ Business Owner	Permitted gas and oil sites	11,068	0	Stable
Employer/ Business Owner	Permitted mineral mine sites	442	0	Stable

## Partners

Name	Description
Federal Emergency Management Agency (FEMA)	FEMA provides funding to predict and mitigate the effects of natural hazards such as earthquakes and landslides.
The Nature Conservancy	Provides funding for priority reclamation projects and partners to identify abandoned mine land features in high priority watersheds.
Bureau of Ocean Energy Management (BOEM)	BOEM provides funding for assessments of offshore mineral resources, such as sand for beach nourishment.
U.S. Army Corps of Engineers	Provides 50/50 match funding for reclamation projects and studies
U.S. Department of Energy (DOE)	The DOE provides funding for energy resource studies, for example, adding data to the National Geothermal Data System and characterizing the properties of potential reservoirs for carbon capture and storage.
U.S. Fish and Wildlife Service	Provides funding for priority reclamation projects
U.S. Geological Survey (USGS)	The USGS provides cooperative funding for geologic mapping, coal resource studies, and the cataloging and preservation of geologic data and samples.
U.S. Mine Safety and Health Administration (MSHA)	DMME coordinates mine inspections with federal counterparts in MSHA, and MSHA funds part of DMME's miner safety training program.
U.S. Office of Surface Mining, Reclamation and Enforcement (OSM)	Provides large-scale funding for Virginia's coal mine reclamation administration and enforcement program, and the abatement of human health and safety features from mining prior to December 15, 1981.
Virginia Department of Conservation and Recreation	Provides funding for priority reclamation projects
National Park Service (NPS)	The NPS provides funding for geologic mapping around National Battlefields in Virginia.
Virginia Department of Emergency Management	DMME assists VDEM in updating the statewide hazard mitigation plan and the Commonwealth's Emergency Operations Plan.
Virginia Energy Efficiency Council	DMME works with the VEEC to promote energy efficiency initiatives.

## Agency Goals

- **Provide for safe and environmentally sound stewardship of Virginia's mineral and energy resources.**

### Summary and Alignment

Virginia needs energy and mineral resources to support its economy and to give its citizens the materials and resources they need. These resources need to be developed responsibly to ensure the safety and protection of mineral extraction workers, the public and the environment.

### Associated State Goal

Natural Resources: Protect, conserve and wisely develop our natural, historical and cultural resources.

## Associated Societal Indicator

### Energy

#### Objectives

##### » Eliminate accidents, injuries, and fatalities at DMME regulated sites.

###### *Description*

DMME's first objective under Goal 1 is to eliminate accidents, injuries and fatalities at regulated sites throughout the Commonwealth.

###### *Objective Strategies*

- The Divisions of Mines, Mineral Mining, and Gas and Oil, with assistance from the Division of Mined Land Reclamation, will conduct inspections to identify and eliminate unsafe conditions and practices.
- The Divisions of Mines, Mineral Mining, Mined Land Reclamation, and Gas and Oil will investigate accidents, incidents and complaints and take actions to prevent future occurrences of unsafe acts and conditions.
- The Divisions of Mines, Mineral Mining, and Gas and Oil will assist operators with safety issues upon request.
- The Divisions of Mines, Mineral Mining, and Gas and Oil will conduct safety training for miners and oil and gas workers.
- DMME will disseminate information to customers on workplace safety.
- DMME will measure the serious personal injury-fatality incident rate and the percentage of safety violations eliminated by the violations' due dates.

###### *Measures*

- ◆ Number of serious injuries and fatalities at mineral and fossil fuel extraction sites per 200,000 worker hours.
- ◆ Percentage of miners rating safety training provided by the Department of Mines, Minerals and Energy as very effective.
- ◆ Percentage of safety violations on coal mine sites successfully eliminated.
- ◆ Percentage of safety violations successfully eliminated on mineral mine sites.

##### » Reduce environmental and public safety hazards across the Commonwealth

###### *Description*

The second objective is to reduce environmental and public safety hazards across the Commonwealth.

###### *Objective Strategies*

- The Divisions of Mineral Mining, Mined Land Reclamation, and Gas and Oil, with support from the Division of Geology and Mineral Resources, will conduct inspections and investigate complaints in accordance with applicable laws and regulations.
- The Divisions of Mineral Mining, Mined Land Reclamation, and Gas and Oil, with support from the Division of Geology and Mineral Resources, will review permit applications, renewals, and amendments in a timely manner.
- The Divisions of Mineral Mining, Mined Land Reclamation, and Gas and Oil, with support from the Divisions of Mines and Geology and Mineral Resources, will respond to public health and safety concerns and environmental issues.
- The Divisions of Mineral Mining, Gas and Oil, and Mined Land Reclamation will assist operators with reclamation issues upon request.
- DMME will cooperate with local, state, and federal agencies to eliminate adverse environmental conditions and public safety hazards.
- The Divisions of Mineral Mining, Geology and Mineral Resources, Gas and Oil, and Mined Land Reclamation will inventory, prioritize and reclaim abandoned, orphaned and bond forfeited sites.
- The Divisions of Mineral Mining, Mined Land Reclamation, Geology and Mineral Resources, and Gas and Oil will pursue funding opportunities to advance the elimination of adverse environmental, public safety and geologic hazards.
- The Divisions of Mineral Mining, Gas and Oil, and Mined Land Reclamation will promote and support awards programs, recognizing outstanding contributions to reclamation within the Commonwealth.
- The Division of Geology and Mineral Resources will investigate and report on geologic hazards and provide mitigation recommendations.
- DMME will increase availability and accessibility of data about adverse environmental conditions, public safety and geologic hazards to our customers.

- DMME will measure off-site impacts, percentage of timely initial permit application approvals, violations within work areas that present potential public safety hazards (red zones), and percentage of environmental violations successfully eliminated by the due date. DMME will measure the number of acres reclaimed and other related measures. The Office of Public Information (OPI) will track social media metrics.

#### Measures

- ◆ Average annual cost of assuring environmental protection at one mineral extraction site.
- ◆ Percentage of permitted mineral and fossil fuel extraction sites with no adverse off-site environmental damage or public safety hazards.
- ◆ Percentage of watersheds inventoried in the Commonwealth.

### » **Increase the health, safety, and environmental knowledge and skills of mineral and fossil fuel extraction workers.**

#### Description

This objective reflects DMME's commitment to the safety of those who work on mineral and fossil fuel extraction sites throughout the Commonwealth.

#### Objective Strategies

- The Divisions of Mines and Mineral Mining will train and certify miners so that mine sites are safe and miners work safely.
- The Divisions of Mines and Mineral Mining will develop, share, and provide certification and testing materials.
- DMME regulatory divisions will develop and share training and educational materials on safety and environmental topics, and provide these to industry.
- The Division of Mineral Mining will develop and share reclamation education materials by November 30, 2018.
- DMME will provide operator assistance on significant emerging issues.
- DMME will measure the number of miners trained, the number of certifications issued, training evaluation survey results, examination pass/fail rates, and the reduction of occurrence of safety and environmental violations.

#### Measures

- ◆ Percentage of miners rating safety training provided by the Department of Mines, Minerals and Energy as very effective.

### • **Encourage economic development through the sound stewardship of Virginia's energy, mineral, land, and water resources.**

#### Summary and Alignment

This goal supports DMME's mission to enhance the development and conservation of energy and mineral resources in a safe and environmentally sound manner in order to support a more productive economy in Virginia.

#### Associated State Goal

Natural Resources: Protect, conserve and wisely develop our natural, historical and cultural resources.

#### Associated Societal Indicator

Energy

#### Objectives

### » **Collaborate with stakeholders to ensure the effective deployment of available resources for economic development opportunities.**

#### Description

DMME's Goal 2, Objective 1 is intended to expand economic development opportunities throughout the state by identifying and organizing resources, and collaborating with localities, customers, and other stakeholders for more effective economic development outcomes.

#### Objective Strategies

- The Division of Energy will lead development of a goals focused Virginia Energy Plan (VEP).
- The Division of Energy will work with the Virginia Economic Development Partnership (VEDP), Port of Virginia and other stakeholders to market Virginia's competitive advantage to attract the offshore wind energy supply chain.
- DMME will oversee the AML Pilot Program to promote economic development in Southwest Virginia.

- The Division of Energy will collaborate with stakeholders to develop and implement programs to invest Volkswagen Environmental Mitigation Trust funds.
- The Division of Energy will expand energy financing programs, including carbon trading regulation funds and Commercial Property Assessed Clean Energy (C-PACE), to provide local financing for energy investments.
- The Division of Energy will support the installation of solar energy systems at four state agency facilities by June 30, 2019.
- The Division of Geology and Mineral Resources Economic Geology Section and Division of Mineral Mining will provide geologic, mineral, and energy resource information to planners to support informed decision-making.
- The Division of Geology and Mineral Resources will update the 1993 1:500,000-scale geologic map of Virginia to digital format.
- VEMP Manager will continue VEMP programs and explore ways to improve their effectiveness.
- VEMP manager will continue work on energy consumption best practices and reporting for state facilities.
- The Division of Energy will continue to work with stakeholders to explore opportunities to expand renewable energy and energy storage deployment.
- The Division of Geology and Mineral Resources will continue to analyze offshore sand deposits for future beach restoration and to assess the feasibility of mineral extraction.
- The Division of Geology and Mineral Resources will continue to produce geologic maps in ongoing project areas.
- The Divisions of Geology and Mineral Resources, and Mineral Mines will continue to preserve geologic data.
- 2.01.15 DMME will evaluate and measure the following and report quarterly to the Strategic Team:
  - Number of jobs/businesses /infrastructure created.
  - Number of visitors/communities served.
  - Customer survey results from all divisions.
  - Energy savings under energy performance contracting.
  - Number of participants in and revenue generated from demand response program.
  - Percentage of targeted areas with completed geologic mapping
  - Website analytics and unique visit frequency.

#### Measures

- ◆ Cumulative net present value of energy conservation savings to the Commonwealth from the energy performance contracting program.
- ◆ Number of people employed as a result of abandoned mine land reclamation construction projects.
- ◆ Percentage of coal mine operators satisfied that mine safety assistance provided by the Department of Mines, Minerals and Energy helps them maintain efficient, viable operations.
- ◆ Percentage of customers satisfied with coal mine safety information and data provided by the Department of Mines, Minerals and Energy.
- ◆ Percentage of customers satisfied with the Department of Mines, Minerals and Energy's Division of Mineral Mining services.
- ◆ Percentage of customers satisfied with the service of the Department of Mines, Minerals and Energy's Division of Geology and Mineral Resources.
- ◆ Percentage of geologic mapping completed in targeted areas.
- ◆ Percentage of miners rating safety training provided by the Department of Mines, Minerals and Energy as very effective.

### » Pursue economic development opportunities through stakeholder collaboration.

#### Description

This objective is intended to improve several divisions' economic development opportunities by encouraging partnerships with key stakeholders.

#### Objective Strategies

- The Division of Energy, in partnership with Virginia Economic Development Partnership, the Virginia Port Authority, and other stakeholders, will seek funding and collaboration opportunities to attract wind energy businesses to the Commonwealth.
- The Divisions of Mined Land Reclamation and Mineral Mining will work with the Department of Environmental Quality to obtain a list and/or description of Brownfield criteria as it relates to coal and mineral mining.
- The Divisions of Mined Land Reclamation and Mineral Mining will create web maps to display potential post-mine land use sites for uses such as solar, wind, and water.
- The Economic Development Group will provide the Divisions of Mined Land Reclamation and Mineral Mining a list of possible post-mine

land use opportunities to be distributed to operators during the permit review process.

- DMME will assess potential for development of rare earth element and critical mineral resources.
- The Division of Geology and Mineral Resources' Economic Geology Section will pursue revenue generating partnerships with local planners.
- The Economic Development Group will develop concept papers on how DMME can deploy resources for targeted water, agriculture and renewable energy economic development projects.
- The Division of Energy Staff will work with the Virginia Solar Energy Development and Energy Storage Authority to develop a comprehensive work plan with a specific component that will examine the true value of energy storage.
- DMME will evaluate and report:
  - Number of energy efficiency & renewable energy businesses or projects assisted.
  - Customer survey results.
  - Amount of solar energy installed on state facilities.
  - Megawatts of renewable capacity added.
  - Percentage of alternative fuel vehicles and stations.
  - Progress reported by the EDG.

#### Measures

### • Enable DMME personnel to perform at their full potential.

#### Summary and Alignment

This goal enables DMME personnel to perform at their full potential.

#### Objectives

#### » Enable all employees to excel in meeting the objectives established in their Employee Work Profile.

##### Description

DMME's Goal 3 , Objective 1 is intended to empower and expand the value and skills of DMME personnel, and improve agency culture overall.

##### Objective Strategies

- DMME will promote the Employee Recognition Program in order to acknowledge and celebrate employee contributions to our mission.
- DMME will utilize internal and external expertise to provide training applicable to all employees.
- DMME will pursue leadership training to further develop agency personnel.
- DMME will develop an agency-wide succession plan, in compliance with Chapter 527 of the 2017 Acts of Assembly.
- DMME will evaluate the performance process to improve the development of employees.
- The performance evaluation process will be used to determine if DMME has enabled employees to excel in meeting objectives established in their EWP.

#### Measures

#### » Pursue new resources and manage current programs

##### Description

This objective assures that DMME will focus on the efficient utilization of existing resources while also securing new resources for future opportunities.

##### Objective Strategies

- DMME will develop a resource plan to identify and reserve resources (funding and personnel) to meet the objectives of the regulatory divisions in the coalfields.
- DMME Directors and Supervisors will encourage employees to participate in new activities outside their core responsibilities for which they will be incentivized.
- Division Directors and Supervisors, with assistance from OHR, will develop a strategy to select a champion for special assignments.
- Each DMME Team Leader will review their team's functions, description, and membership and provide updates to the Executive Administrative Assistant.
- DMME will evaluate customer survey results, grant-related metrics, and other evaluations to assess the efficient use of resources and

effective management of programs.

Measures

» **Continuously improve DMME's organizational and staff capabilities**

*Description*

This objective reinforces DMME's commitment to meeting its goals in the Strategic Plan, and empowers the agency to monitor and make changes that are necessary.

*Objective Strategies*

- DMME will develop and schedule an off-year planning event to review and make necessary revisions to the Strategic Plan.
- The Director of Policy & Planning, with the assistance of the Division Directors, will reconfigure the DMME 2025 Task Forces to maximize its effectiveness as a change agent.
- DMME will actively train and mentor new employees.
- The Strategic Team will monitor the progress of all improvement initiatives.

Measures

## Major Products and Services

DMME offers a wide variety of products and services to its diverse customer base, which includes the following:

- DMME's permitting review services ensure mineral extraction operations are safe, protect the environment, and comply with existing laws and regulations.
- DMME's customer assistance services help customers maintain safe and environmentally protective mineral extraction sites in compliance with regulatory requirements.
- DMME conducts thorough and consistent inspection of permitted sites and enforces laws and regulations addressing worker safety on mineral extraction sites, operational and reclamation environmental controls, and water quality to ensure compliance.
- DMME provides worker certification and training, technical assistance, risk assessment, hazard identification, and cooperative projects, such as mine safety, environmental protection and land reclamation during mineral extraction.
- DMME's geologic and mineral resource information is available to effectively manage development of natural resources, such as coal, natural gas, crushed stone and industrial minerals, and geothermal energy.
- DMME works with industry, state and federal agencies and local governments to respond to and mitigate natural and manmade hazards related to mining, drilling, earthquakes, and landslides.
- DMME conducts reclamation of abandoned mineral extraction sites, corrects damage and mitigates risks of future damage from improperly reclaimed sites while supporting economic development.

Economic Development:

- DMME offers incentives and grant programs for energy industry development to increase jobs and economic activity in Virginia.
- DMME provides mineral resource information to businesses seeking to develop deposits such as precious metals, rare earth elements, industrial minerals, and aggregate.
- DMME prepares a comprehensive Virginia Energy Plan (VEP), which proposes actions consistent with the energy objectives and the Commonwealth Energy Policy including encouraging investment in innovative technologies and supporting programs that stimulate economic growth such as energy performance contracting and property assessed clean energy (PACE) financing.

## Performance Highlights

DMME continues to meet or exceed targets in its department-wide measures. Agency metrics for safety, environmental protection, and worker training all reflect high-quality performance.

Adjusting to ongoing staff and budget reductions, relevant performance measures continue to reflect DMME's emphasis on efficient, effective

core services, and continuous quality improvement. Injury rates are stable, permits continue to be processed in a timely fashion, and customers consistently rate training provided by DMME as excellent. Productivity and efficiency gains enhance service delivery and support adjustments in staff and resources.

## Staffing

Authorized Maximum Employment Level (MEL)	236
Salaried Employees	176
Wage Employees	0
Contracted Employees	10

## Key Risk Factors

### DMME Workforce

Reflecting the overall aging of America's workforce, DMME is facing the need to replace a significant proportion of its workforce in the next five years. A number of employees have left the agency in recent years and more will be eligible for retirement in the coming biennium. Specifically, 47 percent of employees are eligible to retire with more than 30 years of service. This change in workforce requires DMME to transfer a tremendous amount of the institutional knowledge, which helps the agency understand and address the challenges of providing high quality customer service in the worker safety, environmental protection, geology, and energy conservation arenas to new employees. Recruitment and retention are made more difficult as regulated industries continue to offer high wages and other incentives to deal with similar labor shortages. DMME has proactively updated its succession plans and task descriptions across the agency to prepare for these changes.

### The Future of Coal

Given the increased pressures from cheaper fuels such as natural gas and global economic trends the future of coal is an uncertain one. Recently, coal prices have stabilized due in part to changes in federal policies. Idled mines have reopened and new permits have been issued. The economy in Southwest Virginia is tremendously impacted by changes in the coal industry, with ripple effects felt throughout the Commonwealth, which makes long-term economic diversification vital.

### Uncertainty of Federal Policies and Funding

The new federal administration has increased uncertainty regarding federal policies and funding. While it is clear the administration intends, and has already taken action, to decrease federal regulations relating to mining, it is unclear the long-term impacts this will have on production and economic activity including job growth. The federal administration has also signaled it may decrease federal funds to states for certain programs, which could impact DMME including certain federally funded positions as well as services funded by the Mine Safety and Health Administration (MSHA) and the Department of Energy. In FY2019, 41 percent of DMME's funding is budgeted from federal sources. DMME is including strategies for flexibly handling changes in federal funding and policies in the agency's strategic plan.

## Management Discussion

### General Information About Ongoing Status of Agency

DMME continues to focus on its core services in order to fulfill its mission to enhance the development and conservation of mineral and energy resources in a safe and environmentally sound manner in order to support a more productive economy. DMME utilizes its robust strategic planning process, long an agency strength, to identify efficiencies, generate new opportunities, and prepare for the future in challenging economic times. As a matter of course, DMME identifies existing processes that can be improved, thus providing increased benefits to its customers.

In fiscal year 2019 and beyond, DMME anticipates coal mining and natural gas drilling to continue to occur in close proximity in Southwest Virginia. DMME's regulatory divisions will continue to work closely together to ensure both activities are conducted in a safe and environmentally responsible fashion. DMME will continue to search for more innovative and efficient methods to provide training and certification services to its customers.

Technological advancements will be utilized across the agency. For example, geographic information systems and global positioning satellite systems will be utilized to ensure pinpoint accuracy of mineral data on permits, maps, and mineral resource information. DMME is also utilizing drone technology to more easily map abandoned mine land hazards, which is available to inspectors on a smartphone application.

DMME is partnering with the federal Bureau of Ocean Energy Management (BOEM) and the state geological surveys of other Atlantic states to identify new sources of sand in federal waters off the east coast. Known as the Atlantic Sand Assessment Project (ASAP), the initiative aims to assess the quality and volume of sand resources that can be used in future shoreline recovery and resiliency efforts. In the recent past, offshore sand resources have been essential to the maintenance of beaches at Wallops Island, Dam Neck, Sandbridge, and Virginia Beach.

With respect to energy, DMME will deliver an updated Virginia Energy Plan to the Governor and General Assembly in October 2018. DMME will play an important role in the growth of the emerging energy technology industries by providing staff support to the Virginia Solar Energy Development and Energy Storage Authority and Virginia Offshore Wind Development Authority. DMME will also continue to manage the Virginia Energy Management Program (VEMP), providing participating government entities with the tools to conserve and reduce energy usage and provide cost certainty via long-term bulk fuel purchase contracts. Additionally, DMME is taking the lead among southeastern states in developing



a publicly accessible database of the region's geothermal energy resources. Finally, DMME will partner with the Department of General Services to convert the state vehicle fleet to alternative fuels.

### Information Technology

DMME follows existing Virginia Information Technology Agency (VITA) standards pertaining to users, software, and hardware. Vast amounts of DMME staff time have been required for hardware and software updates, and a number of the agency's custom applications required rewrites to make them compatible with Windows 10, Office 2016, and Commonwealth security standards. The new partnership agreements that are being made will hopefully provide better options in the future on both the hardware and software fronts.

DMME has developed custom innovative business applications for its clients and staff which provides advanced capabilities in mapping/GIS, enforcement tools, and web services. DMME has implemented web-based services for the overwhelming majority of our industry customers. These nationally recognized applications have had a tremendous positive impact on both service delivery and customer satisfaction. The award-winning DMME electronic permitting system was expanded from its coal environment protection and land reclamation service area to all regulatory groups at DMME, providing complete web-based functionality to industry customers. A number of interactive mapping web services are in place to support the wide variety of needs for our customers as well. These maps serve as an expanding resource for industry customers in meeting safety and reclamation requirements as well as a valuable resource for the public to inform themselves.

IT costs present challenges for DMME as demands for funding increase. The development of new and innovative services should be balanced with long-term maintenance of other systems. Customers continue to express a high demand for electronic government services and information, and DMME is committed to continuously reducing costs with no adverse effects to our currently existing software and new development.

Server and workstations upgrades will continue over the next two years with the focus on cost reduction and future needs. Years of software development are being re-engineered to work more efficiently while maintaining the high standards of service for which DMME is known. To continue to meet these standards, DMME's web-based services will be made cloud ready during the coming biennium to provide the additional services necessary to meet the needs of our customers.

### Estimate of Technology Funding Needs

#### Workforce Development

DMME currently has 236 FTE (full-time equivalent) positions, with 204 filled. DMME's FTE number has ranged from a high of 298 to a low of 233.

As detailed earlier in this report, DMME is facing the need to replace a significant proportion of its workforce in the next five years. Of the existing workforce, 47 percent are eligible to retire in five years or less with more than 30 years of service. This change in workforce creates a need to transfer a tremendous amount of institutional knowledge to new employees. DMME has proactively updated its transition plans across the agency to prepare for these changes.

#### Physical Plant

DMME maintains four offices across Virginia, one of which it owns (Big Stone Gap), another that is provided space by the Department of Forestry in Charlottesville at no cost, and two that are leased (Richmond and Lebanon). The largest of these facilities is the Buchanan-Smith Building in Big Stone Gap. This facility is 25,827 square feet of office space for approximately 80 staffmembers, an active file area, an Emergency Response Center, a customer assistance center, and the agency's garage of 6,000 square feet that maintains most of the agency's 110 vehicles. Efforts to store files electronically have alleviated the agency's storage problems of the past. DMME continues its work to become completely paperless.

The Buchanan-Smith Building was completed and occupied in 1992 and has maintenance needs typical of a twenty-six year old building. DMME completed an energy performance contract with Trane to upgrade all lighting in the building, garage facility, and all outside lighting to LEDs. The performance contract also included the replacement of the facility's chiller, and replaced one of the coal fired boilers with a modern propane boiler to be used in transition periods to increase energy efficiency. DMME has initiated the process to replace the roof. Maintenance of asphalt surfaces and painting (exterior and interior) will be assessed and contracted depending on budget availability.

DMME's Richmond office is located in the Washington Building on Capitol Square and houses 19 staff members. DMME has leased this space from the Department of General Services since 2009.

DMME's offices in Charlottesville are located in the Department of Forestry's building in the Fontaine Research Park. DMME moved into this building in 1994. The facility features office space for 32 staff members, a research laboratory, a large library, and a customer assistance area.

In 2009, DMME entered into a 20 year lease with the Russell County Industrial Development Authority (RCIDA) for office space located in the Russell County Government Center in Lebanon. This facility features office space for 20 staff members, 24 workstations shared among 40 field inspectors, and a customer assistance area. DMME has enhanced security at the facility through the use of proximity ID cards that must be scanned to gain access to DMME offices. DMME continues to work with the RCIDA on developing other security advancements. Storage issues continue to be addressed at this facility as well. DMME's efforts to electronically store required gas and oil data are ongoing.

### Supporting Documents

Title	File Type
2018 DMME Strategic Plan	MS Word Document
2018 DMME Strategic Plan (Revised Feb 2019)	MS Word Document



**Geologic and Mineral Resource Investigations, Mapping, and Utilization [50601]**

**Description of this Program / Service Area**

This service area develops and delivers information on Virginia’s geology, natural hazards, and mineral and energy resources. Most of the work is cooperatively funded with federal agencies. A key role of this service area is to provide unbiased scientific information to decision makers at many levels of government, from localities to the Governor. For example, staff in this service area provide technical expertise to policymakers on current issues such as pipelines, offshore drilling, and shale gas. Governmental responses to geologic hazards such as earthquakes and landslides benefit from the advice provided by staff geoscientists. Geologic maps, reports, commodity information, and consultations are used by diverse customer groups, including mineral producers, local, state, and federal agencies, developers, consultants, and the general public. The information is used for land use planning, environmental assessments, development of mineral deposits, locating groundwater resources, and other uses. Many activities in this service area are coordinated with the United States Geological Survey.

**Mission Alignment**

This service area directly aligns with DMME’s mission of enhancing the development and conservation of mineral resources in a safe and environmentally sound manner to support a more productive economy. Assistance provided to customers directly supports economic development, protection of the environment, and assurance of public safety.

§ 45.1-383. Division of Geology and Mineral Resources; State Geologist.

§ 45.1-386. Responsibilities and duties of the Division.

**Products and Services**

**Description of Major Products and Services**

Customer assistance

- Hazard identification, mineral and energy resource evaluation, technical assistance, education, and cooperative projects in such areas as environmental protection and land reclamation, and geologic investigation and mapping
- Customer assistance services help customers develop new deposits of mineral and energy resources, maintain safe and environmentally protective mineral resource extraction sites, reduce losses from natural hazards such as landslides and earthquakes, and incorporate geologic information in land use planning.

Regulatory development

- Provide geologic information needed to establish minimum operational and reclamation requirements consistent with governing laws for mineral extraction operations.
- These services ensure the legal standards governing mineral extraction operations are based on a clear understanding of how regulated operations must account for the underlying geologic conditions.

Land reclamation

- Identification and investigation of abandoned/orphaned mine lands to allow prioritization and design of needed reclamation.
- Land reclamation services correct damage and mitigate risks of future damage from unreclaimed or improperly reclaimed mineral extraction lands.

Economic development

- Provide information in support of economic development (site geology, mineral availability, natural hazards, sources of water, and similar information).
- Economic development services support efforts to increase jobs and economic activity in Virginia.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Geohazard identification	COV 45.1-386				
Mineral and energy resource evaluation	COV 45.1-386				

Geologic investigation and mapping	COV 45.1-386 and 45.1-387				
Technical assistance, education, and cooperative projects in such areas as environmental protection and land reclamation	COV 45.1-386				
Provide information to localities in support of economic development (site geology, mineral availability, natural hazards, sources of water, and similar information).	COV 15.2-2224 and 45.1-386				

**Anticipated Changes**

DMME has shifted the focus of its geologic and mineral resource staff as grant funding has become available for new areas of investigation, such as assessment of natural hazards, evaluation of energy resources, and identifying geologic repositories for carbon capture and storage. Services offered will continue to be limited by the availability of grant funding, which is typically focused on subject-specific studies, rather than the provision of general assistance to industry, government agencies, and the general public.

**Factors Impacting**

As this service area relies considerably on federal grant funding, budget uncertainties at the federal level could affect the ability to continue to effectively serve customers.

**Financial Overview**

The Geologic and Mineral Resource Investigations, Mapping, and Utilization service area funding derives from general fund appropriations, federal funds and special funds generated from the sales office for FY19 and FY20.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	848,801	264,915	848,801	264,915
Changes to Initial Appropriation	0	0	0	0

**Supporting Documents**

**Title** **File Type**

## Mineral Mining Environmental Protection, Worker Safety and Land Reclamation [50602]

### Description of this Program / Service Area

This service area implements the Virginia Mineral Mine Safety Act and Virginia's mineral mining reclamation laws. The laws and regulations protect workers on mineral mines and citizens affected by the operations from risks due to unsafe conditions and unsafe acts on the operations, Laws and regulations also protect public health and safety from the possible harmful environmental effects of mineral mining operations and by ensuring proper reclamation.

### Mission Alignment

This service area directly aligns with DMME's mission of enhancing the development of mineral resources in a safe and environmentally sound manner to support a more productive economy. Supporting the mineral mining industry with compliance assistance, technical assistance, and worker safety training ensures that the industry operates safely, protects workers, the public, and the environment, and contributes to economic development.

§ 45.1-161.5. Establishment of divisions; division heads.

§ 45.1-161.292:13. Duties of Director.

§ 45.1-161.292:19. Certification of certain persons employed in mineral mines; powers of the Department.

§ 45.1-161.292:30. License required for operation of mineral mines; term.

§ 45.1-180.3. Authority of Director; enforcement of chapter by injunction.

### Products and Services

#### Description of Major Products and Services

Customer assistance • Job safety analysis, risk assessment, hazard identification, training, technical assistance, education, and cooperative projects – in such areas as mine safety, environmental protection, and land reclamation during mineral extraction. • Customer assistance services assist customers to maintain safe and environmentally protective mineral extraction sites in compliance with regulatory requirements and use mineral production information to manage development and natural resources.

Inspection and enforcement • Thorough and consistent inspection and enforcement of laws and regulations addressing worker safety on mineral extraction sites and operational and reclamation environmental controls. Assess company and individual responsibility and liability as appropriate. Investigate accidents and complaints. Note that DMME does not inspect for worker health and safety on those mineral mines inspected by the federal Mine Safety and Health Administration (MSHA). The agency does complete these inspections on those mines not inspected by MSHA. DMME does investigate accidents and complaints and complete reclamation inspections on all mine sites. Appeals to DMME's reclamation enforcement actions are conducted in accordance with the Administrative Process Act. • Inspection and enforcement services assist customers to maintain safe and environmentally protective mineral extraction sites in compliance with regulatory requirements.

Certification • Certification of persons performing mining and other specialized tasks on mineral mine sites, such as certification of general mineral miners, mine foremen, blasters, electricians, and others. Enforcement actions against certified workers can be made to the Division of Mineral Mining and addressed in accordance with the Administrative Process Act. • Mineral extraction worker certification services assure workers performing specialized tasks necessary to maintain safe mineral extraction sites are qualified to perform these tasks

Permitting • Permit and plan review and approval, financial bonding, coordination with other agencies' regulatory requirements. • Permitting and plan review services ensure mineral extraction operations can be conducted safely and protective of the environment (operations, land reclamation) and in compliance with mineral mining laws and regulations

Regulatory development • Establishing minimum operational and reclamation requirements consistent with governing laws for mineral mining operations. DMME is the regulatory authority for mine safety and reclamation regulations. The Division of Mineral Mining promulgates regulations governing certification of mineral miners. • Regulatory services ensure the legal standards governing mineral mining operations will result in safe and environmentally protective operations while establishing the minimum required intrusion in permitted and licensed operations

Land reclamation • Reclamation of orphaned (abandoned and not reclaimed) mineral mine lands and bond forfeiture sites. Funding for the orphaned land program comes from interest earned on monies paid by permitted mine operators into the Minerals Reclamation Fund. DMME uses these funds to reclaim orphaned mineral mine sites, eliminating public safety, and environmental hazards. The orphaned land program uses the Orphaned Land Advisory Committee for guidance on which orphaned lands should receive the highest priority for reclamation. • Land reclamation services correct damage and mitigate risks of future damage from improperly reclaimed mineral extraction lands.

Economic development • Providing information on mineral availability in support of economic development. • Reclaimed mineral mines may be developed into new commercial, industrial, or residential sites. • Economic development services support efforts to increase jobs and economic activity in Virginia.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Thorough and consistent inspection and enforcement of laws and regulations addressing worker safety on mineral extraction sites and operational and reclamation environmental controls.	COV Title 45.1, Chapter 16				
Mineral extraction worker certification services assure workers performing specialized tasks necessary to maintain safe mineral extraction sites are qualified to perform these tasks	COV Title 45.1, Chapter 16				
Permitting and plan review services ensure mineral extraction operations can be conducted safely and protective of the environment (operations, land reclamation) and in compliance with mineral mining laws and regulations	COV Title 45.1, Chapter 16				
Reclamation of orphaned (abandoned and not reclaimed) mineral mine lands and bond forfeiture sites	COV Title 45.1, Chapter 16				

### **Anticipated Changes**

No major changes are anticipated in this service area. However, uncertainty at the federal level with respect to MSHA funding could result in additional mines to inspect for worker health and safety.

### **Factors Impacting**

As mentioned above, uncertainties at the federal level may increase the workload for the Division of Mineral Mining.

### **Financial Overview**

The Mineral Mining service area's funding derives from general fund appropriation, permit and license fees paid by mineral mine operators, federal mine safety and mine reclamation grant funds, bond forfeiture proceeds, and orphaned land fund proceeds.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	1,557,856	1,360,825	1,557,856	1,360,825
Changes to Initial Appropriation	0	0	0	0

### **Supporting Documents**

Title	File Type
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**Gas and Oil Environmental Protection, Worker Safety and Land Reclamation [50603]**

**Description of this Program / Service Area**

This service area implements the Virginia Gas and Oil Act and gas and oil regulations promulgated by the Virginia Gas and Oil Board and the Department of Mines, Minerals and Energy. The law and regulations protect the property ownership interests of persons owning gas and oil rights around gas and oil wells, and protect the public safety and health from possible environmental effects of gas and oil wells and gas gathering pipelines.

**Mission Alignment**

This service area directly aligns with DMME’s mission of enhancing the development of energy resources in a safe and environmentally sound manner to support a more productive economy. This service area enforces the Virginia Gas and Oil Act which requires DMME to foster, encourage and promote the safe production of natural gas while protecting the Commonwealth’s citizens and environment.

§ 45.1-161.5. Establishment of divisions; division heads.

§ 45.1-361.4. Duties and responsibilities of the Director.

§ 45.1-361.27. Duties, responsibilities and authority of the Director.

**Products and Services**

**Description of Major Products and Services**

Customer assistance • Training, technical assistance, education, hazard identification, and cooperative projects – in such areas as worker safety, environmental protection and land reclamation during gas and oil operations. This helps customers maintain safe and environmentally protective extraction sites in compliance with regulatory requirements. • Information about production and revenue to persons owning gas and oil resources, or those whom claim ownership of contested coalbed methane proceeds held in escrow. • Information on the natural gas and oil resources and related geology in Virginia to companies wishing to develop the state’s gas and oil resources.

Inspection and enforcement • Thorough and consistent inspection and enforcement of laws and regulations addressing operational and reclamation environmental controls and worker safety on gas and oil sites. Assessing company and individual responsibility and liability as appropriate. Investigate accidents and complaints. Note that DMME is not the primary agency with worker safety jurisdiction on gas and oil sites. DMME may shut down equipment or operations if it finds an imminent danger to persons, but works with the Virginia Department of Labor and Industry (the agency with primary jurisdiction) on other worker safety issues. Appeals to DMME enforcement actions are taken to the Virginia Gas and Oil Board. • Inspection and enforcement services assist customers to maintain safe and environmentally protective mineral extraction sites in compliance with regulatory requirements.

Permitting • Permit and plan review and approval, financial bonding, coordination with other agencies’ regulatory requirements. • Permitting and plan review services ensure gas and oil operations can be conducted safely and protective of the environment (operations, well plugging, land reclamation) and be in compliance with governing laws and regulations.

Regulatory development • Establishing minimum operational and reclamation requirements consistent with governing laws for gas and oil operations. DMME is the regulatory authority for environmental controls on gas and oil operations. The Virginia Gas and Oil Board promulgates regulations governing protection of gas or oil owners’ correlative rights (rights related to ownership interest in gas or oil around a well location). • Regulatory services ensure the legal standards governing gas and oil operations will result in safe and environmentally protective operations while establishing the minimum required intrusion in permitted operations. The services also ensure that gas and oil owners receive their proportional share of income from sale of gas and oil from wells near their property.

Land reclamation • Plugging of orphaned (abandoned and not plugged) gas and oil wells, reclamation of gas and oil lands and bond forfeiture sites. Funds for the land reclamation activities come from the Orphaned Well Fund, performance bonds posted by gas and oil operators, or the Gas and Oil Plugging and Restoration Fund when bond proceeds are insufficient. • Plugging and land reclamation services correct damage and mitigate risks of future damage from improperly plugged wells and unreclaimed gas and oil well and pipeline sites.

Correlative rights protection • Virginia Gas and Oil Board issues orders pooling the ownership interests of owners of gas and oil in the area around gas and oil wells (correlative rights) to ensure all owners receive compensation for the gas and oil resources they own. • The identity of some gas and oil owners may not be known or the owners may not be locatable from available records due to heirships or other unregistered transfer of title. In other cases, there may be a conflict among potential owners of coalbed methane (surface owner, gas owner, coal owner). In these cases, the Gas and Oil Board provides for establishment of or manages escrow accounts to hold the proceeds from gas or oil development until the proper owner is found or determined. • Protects ownership interest of persons owning gas or oil rights, ensuring that the proper owners will receive the proceeds from sales of produced gas or oil.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or	GF	NGF

			Discretionary		
Thorough and consistent inspection and enforcement of laws and regulations addressing operational and reclamation environmental controls and worker safety on gas and oil sites.	COV Title 45.1, Chapter 22.1				
Permit and plan review and approval, financial bonding, coordination with other agencies' regulatory requirements.	COV Title 45.1, Chapter 22.1				
Plugging of orphaned (abandoned and not plugged) gas and oil wells, reclamation of gas and oil lands and bond forfeiture sites.	COV Title 45.1, Chapter 22.1				
Virginia Gas and Oil Board issues orders pooling the ownership interests of owners of gas and oil in the area around gas and oil wells (correlative rights) to ensure all owners receive compensation for the gas and oil resources they own.	COV Title 45.1, Chapter 22.1				

### **Anticipated Changes**

As long as natural gas prices remain stable, the level of activity in this industry is anticipated to remain at current levels or to grow slightly.

### **Factors Impacting**

If market conditions change to the extent that production significantly increases, DMME will be challenged to find the resources to maintain current levels of service.

### **Financial Overview**

The Gas and Oil Environmental Protection, Worker Safety and Land Reclamation service area funding derives from general funds, permit and license fees paid by gas and oil operators, bond forfeiture proceeds, and orphaned well revenues.

#### Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	883,259	770,534	883,259	770,534
Changes to Initial Appropriation	0	0	0	0

### **Supporting Documents**

Title	File Type
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**Coal Environmental Protection and Land Reclamation [50604]**

**Description of this Program / Service Area**

This service area implements the Virginia Coal Surface Mining Control and Reclamation Act of 1979 (Act) and attendant regulations. Virginia operates the coal surface mining regulatory program under approval (primacy) of the federal Office of Surface Mining. The law and regulations protect the public safety and health from the possible harmful environmental effects of coal mining operations. This service area also administers the Abandoned Mine Land program which remediates sites that were mined before 1977.

**Mission Alignment**

This service area directly aligns with DMME’s mission of enhancing the development of energy resources in a safe and environmentally sound manner to support a more productive economy by effectively regulating the coal mining industry.

§ 45.1-161.5. Establishment of divisions; division heads.

§ 45.1-230. Authority and duties of Director.

§ 45.1-260. State Reclamation Program.

**Products and Services**

**Description of Major Products and Services**

Customer assistance • Risk assessment, hazard identification, technical assistance, education, and cooperative projects to enhance environmental protection and land reclamation during coal extraction. • Customer assistance services assist customers to maintain safe and environmentally protective coal mines in compliance with regulatory requirements.

Inspection and enforcement • Thorough and consistent inspection and enforcement of laws and regulations addressing operational and reclamation environmental controls, and water quality on coal mines. Investigate accidents and complaints. Civil penalty assessment. • Inspection and enforcement services assist customers to maintain safe and environmentally protective coal mines in compliance with regulatory requirements.

Certification • Certification of persons performing blasting on surface coal mines. • Certification services assure workers performing surface coal mine blasting are qualified to perform these tasks.

Permitting • Permit and plan review and approval, financial bonding, coordination with other agencies’ regulatory requirements. • Permitting and plan review services ensure coal mining operations can be conducted safely and protective of the environment (operations, land reclamation, water quality) and in compliance with coal operation and reclamation laws and regulations.

Regulatory development • Establishing minimum operational and reclamation requirements consistent with governing laws for coal mining operations. • Regulatory services ensure the legal standards governing coal mining operations will result in safe and environmentally protective operations while establishing the minimum required intrusion in permitted operations.

Land reclamation • Reclamation of abandoned coal mine land and bond forfeiture sites; replacement of water supplies damaged from historic coal mining operations; emergency reclamation of imminent dangers caused from abandoned mine land; and restoration of streams damaged by acid mine drainage and sedimentation. • Land reclamation services correct damage and mitigate risks of future damage from improperly reclaimed coal mined lands.

Economic development • Providing mapping and information in support of economic development (site geology, mineral availability, sources of water, and similar information). • Economic development services support efforts to increase jobs and economic activity in Southwest Virginia.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Thorough and consistent inspection and enforcement of laws and regulations addressing operational and reclamation environmental controls, and water quality on coal mines	COV Title 45.1, Chapter 19				
Certification of persons performing blasting on surface coal mines	COV Title 45.1, Chapter 19				

Permit and plan review and approval, financial bonding, coordination with other agencies' regulatory requirements	COV Title 45.1, Chapter 19				
Reclamation of abandoned coal mine land and bond forfeiture sites	COV Title 45.1, Chapter 19				
Emergency reclamation of imminent dangers caused from abandoned mine land; and restoration of streams damaged by acid mine drainage and sedimentation	COV Title 45.1, Chapter 19				
Providing mapping and information in support of economic development	COV Title 45.1, Chapter 19				

### **Anticipated Changes**

It is possible that actions may be taken at the federal level to stimulate the coal industry. However, it is uncertain what effect this would have, given market prices of natural gas and coal produced in other parts of the country.

The economic development of this of this service area will undoubtedly increase as DMME has received \$10 million from the federal Office of Surface Mining and Reclamation Enforcement in 2017 and 2018. DMME administers the program to distribute these funds for projects that spur economic development on abandoned mine lands in Southwest Virginia. Areas of focus include infrastructure improvement for new industrial sites, broadband access, clean energy development, tourism, and agriculture.

### **Factors Impacting**

Uncertainty at the federal level may result in reduced federal funds used to reclaim abandoned mine land.

### **Financial Overview**

The Coal Environmental Protection and Land Reclamation service area funding derives from federal funds, general funds, bond forfeiture proceeds, permit fees from coal mine operators, abandoned mine land set aside revenue designated for water projects in the coalfield region of Virginia, and National Pollution Discharge Elimination System fees.

#### Biennial Budget

	<b>2019 General Fund</b>	<b>2019 Nongeneral Fund</b>	<b>2020 General Fund</b>	<b>2020 Nongeneral Fund</b>
Initial Appropriation for the Biennium	2,067,553	16,662,385	2,067,553	16,662,385
Changes to Initial Appropriation	0	0	0	0

### **Supporting Documents**

<b>Title</b>	<b>File Type</b>
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**Coal Worker Safety [50605]**

**Description of this Program / Service Area**

This service area implements the Virginia Coal Mine Safety Act and attendant regulations. The coal mine safety laws and regulations protect workers on coal mines and other public affected by the operations from risks due to unsafe conditions and unsafe acts on the operations.

§ 45.1-161.5. Establishment of divisions; division heads.

§ 45.1-161.21. Duties of the Chief.

§ 45.1-161.57. License required for operation of coal mines; term.

**Mission Alignment**

This service area directly aligns with DMME’s mission of enhancing the development of energy resources in a safe and environmentally sound manner to support a more productive economy by ensuring worker safety at the Commonwealth’s coal mines.

**Products and Services**

**Description of Major Products and Services**

Customer assistance • Job safety analysis, risk assessment, hazard identification, training, technical assistance, education, and cooperative projects to enhance mine safety. • Customer assistance services assist customers to maintain safe coal mines in compliance with regulatory requirements.

Inspection and enforcement • Thorough and consistent inspection and enforcement of laws and regulations addressing worker safety on coal mines. Assessment of company and individual responsibility and liability as appropriate. Investigate accidents and complaints. • Inspection and enforcement services assist customers to maintain safe coal mines in compliance with regulatory requirements.

Certification • Certification of persons performing mining and other specialized tasks on coal mines, such as certification of general coal miners, mine foremen, blasters, electricians, underground diesel equipment mechanics, gas detection, hoisting engineer, and others. • Coal miner certification services assure workers performing specialized tasks necessary to maintain safe sites are qualified to perform these tasks.

Licensing and plan review • Plan review and approval and coordination with other agencies’ regulatory requirements. • Plan review services ensure coal mining operations can be conducted safely and in compliance with mineral extraction laws and regulations.

Regulatory development • Establishing minimum safety requirements consistent with the Virginia Coal Mine Safety Act. • Regulatory services ensure the legal standards governing coal mining operations will result in safe operations while establishing the minimum required intrusion in licensed operations.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Thorough and consistent inspection and enforcement of laws and regulations addressing worker safety on coal mines	COV Title 45.1, Chapter 14.2				
Certification of persons performing mining and other specialized tasks on coal mines, such as certification of general coal miners, mine foremen, blasters, electricians, underground diesel equipment mechanics, gas detection, hoisting engineer, and others	COV Title 45.1, Chapter 14.2				
Plan review and approval and coordination with other agencies’ regulatory requirements	COV Title 45.1, Chapter 14.2				

Establishing minimum safety requirements consistent with the Virginia Coal Mine Safety Act	COV Title 45.1, Chapter 14.2				
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**Anticipated Changes**

It is possible that the new federal administration may attempt to take action to stimulate the coal industry. However, it is uncertain what effect this would have, given market prices of natural gas and coal produced in other parts of the country.

**Factors Impacting**

Continued automation in the mining industry could result in further reduction in employment.

**Financial Overview**

The Coal Worker Safety service area funding derives from general funds, federal funds, license and certification fees, and mine rescue fees.

Biennial Budget

	<b>2019 General Fund</b>	<b>2019 Nongeneral Fund</b>	<b>2020 General Fund</b>	<b>2020 Nongeneral Fund</b>
Initial Appropriation for the Biennium	4,798,126	702,961	4,798,126	702,961
Changes to Initial Appropriation	0	0	0	0

**Supporting Documents**

**Title** **File Type**

**Energy Conservation Advisory Services [50703]**

**Description of this Program / Service Area**

This is a newly created service area. Currently, its sole function is to work with the Virginia Solar Energy Development and Energy Storage Authority to conduct a two year study of the emerging energy storage industry. A Request for Proposals for this study was released on September 21, 2018.

**Mission Alignment**

Item 117(C) of the 2018 Appropriations Act states: Out of this appropriation, \$50,000 the first year and \$50,000 the second year from the general fund shall be used for the Virginia Solar Development Authority working with the Department of Mines, Minerals and Energy to conduct a study to determine whether or not future legislation in the form of regulatory reforms and incentives will prove fruitful in encouraging emerging energy storage capacity in the Commonwealth.

**Products and Services**

**Description of Major Products and Services**

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Conduct a study to determine whether or not future legislation in the form of regulatory reforms and incentives will prove fruitful in encouraging emerging energy storage capacity in the Commonwealth.	Item 117(C) of the 2018 Appropriations Act				

**Anticipated Changes**

**Factors Impacting**

**Financial Overview**

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	50,000	0	50,000	0
Changes to Initial Appropriation	0	0	0	0

**Supporting Documents**

**Title** **File Type**

**Energy Conservation and Alternative Energy Supply Programs [50705]**

**Description of this Program / Service Area**

This service area works to increase the use of renewable and alternative energy products and services, increase energy efficiency in state government operations, and improve other customers' ability to make informed choices related to energy efficiency, renewable and alternative energy uses, environmental stewardship, and economic development activities.

§ 45.1-161.5. Establishment of divisions; division heads.

§ 45.1-390. Division of Energy established; findings and policy; powers and duties.

**Mission Alignment**

This service area directly aligns with DMME's mission of enhancing the development and conservation of energy resources in an environmentally sound manner to support a more productive economy. This service area supports the growth of energy efficiency and renewable energy in the Commonwealth.

**Products and Services**

**Description of Major Products and Services**

Customer assistance • Provide energy planning, training, technical assistance, education, and cooperative projects to implement energy efficiency and alternative energy projects. • Customer assistance services help customers efficiently use energy resource and develop new energy supply options. Provide staff support to the Virginia Solar Energy Development and Energy Storage Authority, the Virginia Offshore Wind Development Authority and the Virginia Nuclear Energy Consortium Authority.

Grants and financing • Administer grant and revolving loan programs to promote energy efficiency projects, serve as a grants manager for federal funds.

Economic development • Manage economic development incentives, such as the biofuels incentive grant program, for energy industry development and provide information needed for new energy business development. • Economic development services support efforts to increase jobs and economic activity in Virginia.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Provide energy planning, training, technical assistance, education, and cooperative projects to implement energy efficiency and alternative energy projects	COV Title 45.1, Chapter 26				
Provide staff support to the Virginia Solar Energy Development and Energy Storage Authority	COV Title 67, Chapter 15				
Provide staff support to the Virginia Offshore Wind Development Authority	COV Title 67, Chapter 12				
Provide staff support to the Virginia Nuclear Energy Consortium Authority	COV Title 67, Chapter 14				
Administer grant and revolving loan programs to promote energy efficiency projects, serve as a grants manager for federal funds.	COV Title 45.1, Chapter 26				
Manage economic development incentives for energy industry	COV Title 45.1, Chapter 26				

development and provide information needed for new energy business development					
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**Anticipated Changes**

The Division of Energy continues to work to implement provisions of the 2014 Virginia Energy Plan. A new Virginia Energy Plan will be issued in 2018. The future of continued federal funding is uncertain.

The Division of Energy will collaborate with the Department of Environmental Quality and other stakeholders to develop and implement programs to invest Volkswagen Environmental Mitigation Trust funds. It is expected that a portion of these funds will support the development and implementation of an electric vehicle charging network across the Commonwealth.

**Factors Impacting**

The continued falling price of renewable energy in general and solar energy in particular could create additional opportunities in this service area.

**Financial Overview**

The Energy Conservation and Alternative Energy Supply Programs service area funding derives from federal funds and general funds designated for the State Energy Program and the Southern States Energy Board dues, and the Electricity Surcharge Special Funds.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	952,560	2,114,371	952,560	2,114,371
Changes to Initial Appropriation	0	0	0	0

**Supporting Documents**

**Title** **File Type**

## General Management and Direction [59901]

### Description of this Program / Service Area

This service area provides management direction and administrative support to the Department of Mines, Minerals and Energy's other service areas. Products and services include:

- Customer assistance to other DMME staff, energy and mineral businesses, vendors, other federal, state and local agencies, and the general public.
- Regulatory development to establish minimum requirements for worker and public safety and operation and reclamation of coal, gas and oil, and mineral mine sites.
- Fee collection for permits, licenses, certifications, bonding, and land reclamation.
- Management and administrative support to ensure compliance with mandates and effective and efficient delivery of service to DMME's customers.

### Mission Alignment

This service area aligns with DMME's mission of enhancing the development and conservation of energy and mineral resources in a safe and environmentally sound manner to support a more productive economy.

[§ 45.1-161.5. Establishment of divisions; division heads.](#)

### Products and Services

#### Description of Major Products and Services

Customer assistance:

- Assistance to vendors, access to management and decision makers, public information services, DMME's Internet web services, and other services are provided to DMME's customers. • General management and administrative customer assistance services helps DMME employees operate efficiently and effectively, with the proper equipment, support, and training needed to complete their jobs.

Regulatory development:

- Establishing minimum operational and reclamation requirements consistent with governing laws for mineral extraction operations. • General management and administrative regulatory services ensure the regulations are clearly written, will be effective in meeting their purpose, and are coordinated among the various DMME activity areas. Administrative services staff work with regulatory program staff to draft required regulatory submittal and review packages, and ensure that DMME has complied with the Administrative Process Act, Virginia Register Act, executive orders, and other governing documents.

Land reclamation:

- Reclamation of abandoned coal mine lands, orphaned mineral mine lands, and orphaned gas and oil wells, and bond forfeiture sites; replacement of water supplies damaged from historic coal mining operations; emergency reclamation of imminent dangers caused from abandoned mined lands; restoration of streams damaged by acid mine drainage and sedimentation. • Administrative services supports land reclamation services through collection of reclamation fees and assisting with the contracting process for reclamation projects.

Correlative rights protection:

- Establishment of orders protecting the property interests for persons owning gas or oil interests around producing gas and oil wells (called correlative rights). Management of escrow accounts where ownership of coalbed methane gas is contested and when owners of the gas or oil interests are unknown or unlocatable. • General management and administrative support services contracts for the escrow agent that manages the escrow accounts.

Grants and financing:

- Providing direct grants, serving as a grants manager for federal funds, and developing alternative financing sources for energy efficiency. • General management and administrative grant services provide the grant approval, budgeting, reporting, and cash management services for the DMME grants.

Economic development:

- Managing economic development incentives for energy industry development and providing information in support of economic development (site geology, mineral availability, sources of water, and similar information). • General management provides economic development services by coordinating assistance DMME provides to state, regional, and local economic development organizations.

Management and administrative support:

- Grant management, budgeting, accounting, accounts payable, human resources, procurement, inventory, information technology services and



computer security, document retention, media relations, public information, regulatory and legislative review and development, intellectual properties management, internal auditing, fleet management, and issues management services. • Management and administrative support services assure compliance with externally mandated program and administrative laws, regulations, and policies (state and federal) and internal management standards, and promote effectiveness and efficiency (doing the right things well) in DMME's operations.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Customer assistance to other DMME staff, energy and mineral businesses, vendors, other federal, state and local agencies, and the general public.	COV Title 45,1, Chapter 14.1				
Regulatory development to establish minimum requirements for worker and public safety and operation and reclamation of coal, gas and oil, and mineral mine sites.	COV Title 45,1, Chapter 14.1				
Fee collection for permits, licenses, certifications, bonding, and land reclamation.	COV Title 45,1, Chapter 14.1				
Management and administrative support to ensure compliance with mandates and effective and efficient delivery of service to DMME's customers.	COV Title 45,1, Chapter 14.1				

### **Anticipated Changes**

Minimal changes are anticipated to the products and services offered by this service area. Administrative support to DMME divisions and their customers is vital to the success of DMME in meeting its mission.

### **Factors Impacting**

### **Financial Overview**

The General Management and Direction service area funding derives from general fund appropriation, indirect cost recovery revenue, and miscellaneous sources such as pool bond administration and civil penalty recreation funds.

### Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	2,337,142	1,708,796	2,337,142	1,708,796
Changes to Initial Appropriation	0	0	0	0

### **Supporting Documents**

**Title** **File Type**